Class L B1613

Book I6A4

Department of Public Instruction

EDUCATIONAL PUBLICATIONS

Bulletin No. 11

Uniform Course of Study for the High Schools of Indiana

Issued by
CHARLES A. GREATHOUSE
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION
1914-1915

monograph

Indiana.

Department of Public Instruction

37
457
Pat 12

Uniform Course of Study for the High Schools of Indiana

Issued by
CHARLES A. GREATHOUSE
STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

1914-1915

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING
1914

LB1613
.I6 A4

D. OF D.
OCT 1 1914

INTRODUCTION.

The high school has become one of the most important factors in Indiana's educational system.

An outgrowth of the system of academies whose purpose was to prepare students for college, it has more and more assumed a place of its own as a means of free public education beyond and above that furnished by the elementary schools.

The progress in the standardization of high schools in Indiana and the growth in the number of pupils enrolled have been phenomenal, as shown by statistics taken from the records of the State Department of Public Instruction and set forth in the following tabulation:

HIGH SCHOOL PROGRESS DURING A PERIOD OF TEN YEARS.

High Schools.	1901-2.	1911-12
Commissioned	185	365
Certified	0	175
Accredited	0	56
Non-classified	519	205
Total	704	801
High School Teachers.		
Commissioned	899	1,931
Certified	0	402
Accredited	0	75
Non-classified	661	618
Total	1,560	3,026
Pupils	36,307	56,523

This growth cannot be accounted for by the growth in population as the percentage of growth shows:

1. Gain in population in Indiana 1900-1910..... 7.3%
2. Gain in the number of High School teachers employed... 94%
3. Gain in the number of High School pupils enrolled..... 55%
4. Gain in the number of classified High Schools..... 222%

ELIMINATION OF PUPILS.

There is one matter that should be deeply impressed upon the mind of each teacher and school official and that is, *too many pupils do not enter the High School, and too many who enter drop out before finishing the course.*

The report of the State Superintendent for 1911-12 shows the enrollment as follows:

Pupils.	Number Enrolled.
Eighth grade	39,298
1st Year High School	21,244
2nd Year High School	14.986
3rd Year High School	11,141
4th Year High School	9,152

These statistics suggest that a large number of pupils do not enter the High School, and that many of those who enter, do not continue until the end of the course. True, conditions have greatly advanced in these respects, in the past four years, as shown by the following figures, but we still are confronted with a large and important problem of bringing more pupils into our high schools and keeping them there for the entire course.

The following figures for the four years 1910 and through 1913 are as accurate as can be secured. The data regarding increase in population was furnished by the State Statistician:

	Population of Indiana.	Total School Enrollment.	High School Enrollment.	High School Graduates.
1910	2,700,876	531,459	51,103	7,024
1911	2,723,442	530,267	53,381	7,729
1912	2,742,117	532,821	56,523	8,000
1913	2,760,792	537,500	58,742	8,627
Gain in 4 years	59,916	6,041	7,639	1,603
% Gain in 4 years	2.2	1.1	15	22

This shows, 1st. That the total school enrollment in the grades has not kept pace with the increase in population.

2nd. That the increased enrollment in the High School exceeds the total increase in school enrollment.

3rd. That the per cent. of increase in the High School enrollment is almost fourteen times that of the increase in total school enrollment.

4th. That the number of students actually completing the course by graduation has increased 22%; in other words the per

cent. increase is just ten times as great as the per cent. of increase in population.

In view of the fact that the large per cent. of the high school pupils are above the compulsory school age we feel justified in declaring the High School to be reaching more pupils and holding more pupils than at any time in its history.

While there is a certain proportion of pupils who will necessarily be eliminated during the course, a study of the situation has shown the following reasons to be the most common:

1. Economic necessity of going to work.
2. Ill health.
3. Belief that the High School Course is of insufficient economic value.
4. Lack of interest in subjects.
5. Lack of ability.
6. Dissatisfaction of pupils with teachers who do not understand them.

School authorities should study the local conditions and ascertain what causes pupils to drop out of High School, and seek some remedy.

In regard to the first cause stated a pupil can frequently be shown that it is of greater economic value to remain in the school and get additional training than it is to go to work at small wages. It is probable that assistance can be given pupils in securing work outside of school hours which will enable them to remain in school.

In regard to the second cause—ill health—the great progress in sanitation of schools under the provisions of the sanitary schoolhouse law insures the conservation of the health of pupils, as never before. The teacher should give direction and advice to the pupils, concerning suitable clothing and the protection of the body, and should see that provisions for proper ventilation, heating and sanitation are made.

The belief that the High School Course lacks in economic value has been widespread. Indiana has wisely provided for extension of the High School Course by the introduction of pre-vocational work in all commissioned and certified high schools.

The work as outlined in the course will be of real economic value and will open up many new fields of interesting thought and endeavor.

This means that interest will be added to the course which will tend to hold pupils longer in school.

The lack of ability to finish the course will be a constant factor, but to a smaller extent as more choice of interesting subjects is offered. The wise teacher will exercise much patience with the pupil who is earnestly striving, even if he is lacking in ability as is too frequently asserted.

The question of dissatisfaction with the teachers who do not understand children is one of importance. Whether real or fancied this will determine to a large extent the response the pupil will make to the endeavors of the teacher and the sympathetic relation which exists.

Each high school teacher should be thoroughly informed on the nature and psychological state of the adolescent mind, and this should be taken into account in all demands made upon the strength of mind and body of the pupils.

The best solution for most of these problems is a sympathetic relation between teacher and patron, which is the great opportunity the teacher enjoys and which is too often neglected.

The Course of Study for 1914-15 is considerably changed from that of last year. The outlines for the various subjects have been prepared by the authors of the various texts where there was an exclusive adoption under the 1913 law.

These outlines are to be followed as a guide in using the adopted texts in the manner considered by the author as adapted to the best results. This of course does not mean that the teacher shall be limited thereby, but that constant endeavor should be put forth to inject into the work the influence of personality and initiative.

Constant application should be made to local conditions and the work should be vitalized by showing its value in application to the problems of the school, the community and life.

The outline for the prevocational work is practically the same as for last year.

As indicated in the Course of Study, Domestic Science includes Sewing, Cooking, and all forms of home-making.

Whatever portion of the work is undertaken should be done with regard to standards of quality rather than quantity.

This work will be directed by the Vocational Department through the special bulletins which will outline the work in such a manner as to adapt it to the needs of the schools of various sizes.

Questions regarding the minimum amount of work, or any variation from the course, should be taken up with the Vocational Division, Department of Public Instruction, Indianapolis.

PROGRAM.

The daily program is a matter of great importance and has been studied in much detail. The suggested programs for schools of different sizes have been approved by a committee of the county superintendents' association and are inserted by their request. They should be studied for suggestions as how best to arrange the time and work.

The plan of combining classes and alternation of work is to be used only where the number of pupils is too small to make a good class and where the number of teachers is limited.

The inspection of high schools will be in the hands of the high school inspector, who will visit as many of the schools as possible.

Reports will be called for early in the year and blanks sent for this purpose. These reports should be filled promptly and returned by the date suggested, as they form a basis for classification of schools.

The hope of the department is that the high school inspector may be of assistance to the greatest number of schools, and questions concerning the course or administration should be forwarded to this office.

At the request of the County Superintendents' Association semi-annual examination questions will be issued by this department. These questions are prepared by the committee from that association and their use is a matter of choice with the counties.

The value of these examinations to this department will depend largely upon their widespread use, and the schools are asked to use them as a means of standardizing the course of study and character of work in all the high schools of the State.

CHARLES A. GREATHOUSE.

UNIFORM COURSE OF STUDY FOR THE COMMISSIONED, CERTIFIED AND ACCREDITED HIGH SCHOOLS OF INDIANA, 1914-1915.

Adopted by the State Board of Education, and Published by the Department of Public Instruction.

High School Standards.

The Law.

[Approved March 9, 1907. In force April 10, 1907.]

Common Schools Defined—High School Courses 1. The public schools of the State shall be and are defined and distinguished as (a) elementary schools and (b) high schools. The elementary schools shall include the first eight (8) years of school work, and the course of study for such year (that) which is now prescribed or may hereafter be prescribed by law. The commissioned high schools shall include not less than four (4) years' work following the eight years in the elementary schools. The high school course in noncommissioned high schools shall be uniform throughout the State and shall follow a course to be established and amended or altered from time to time as occasion may arise, by the State Board of Education.

High School Studies. The following enumerated studies shall be taught in all commissioned high schools throughout the State, together with such additional studies as any local board of education may elect to have taught in its high school: Provided, That such additions shall be subject to revision of the State Board of Education. Mathematics: Commercial arithmetic, algebra, geometry. History: United States, ancient, mediæval or modern. Geography: Commercial or physical. English: Composition, rhetoric. Literature: English, American. Language (foreign): Latin or German. Science: Biology, physics or chemistry. Civil government: General, state. Drawing. Music.

[Approved February 22, 1913. In force May 1, 1913.]

Vocational Education:

SEC. 5. Elementary agriculture shall be taught in the grades in all town and township schools; elementary industrial work shall be taught in the grades in all city and town schools, and elementary domestic science shall be taught in the grades in all city, town and township schools. The state board of education shall outline a course of study for each of such grades as they may determine which shall be followed as a minimum requirement. The board shall also outline a course of study in agriculture, domestic science and industrial work, which they may require city, town and township high schools to offer as regular courses. After September 1, 1915, all teachers required to teach elementary agriculture, industrial work or domestic science shall have passed an examination in such subjects prepared by the State Board of Education.

ACTION OF THE STATE BOARD OF EDUCATION.

In harmony with the provisions of the above law, the State Board of Education has taken the following action:

(1) In rural, town, and city high schools of the State, a minimum requirement of one year's work of five recitations per week or the equivalent in domestic science and either agriculture or industrial work shall be maintained and no credit allowed in these subjects for less than the amount of work thus prescribed.

(2) The law enumerating the studies which shall be taught in commissioned high schools is to be interpreted to mean that competent teachers of these branches must be regularly employed and prepared to teach the same to all pupils who may express a desire to receive such instruction. The intent of the law is not satisfied by declaring that there are no pupils in these subjects when no teacher has been previously employed. It is the duty of the schools to offer instruction in all of the subjects required by law. The question as to whether pupils elect to pursue studies is to be determined subsequently to and not in advance of the organization of the school curriculum.

(3) On and after September 1, 1912, all graduates from commissioned high schools in Indiana must have done the following:

First. Completed not less than 16 units of high school work. A unit is defined as a year's study of 5 periods a week for not less than 32 weeks, provided that, in schools where a course of not less

than 9 months is maintained, 15 units shall be acceptable for graduation.

Second. Of these 16 units (respectively 15 units) 9 shall be obtained in the following subjects:

English, 3 units.
Foreign Language, 2 units.
Mathematics, 2 units.
Natural Science, 1 unit.
History, 1 unit, and
7 (respectively 6) additional units to be taken in the above or other subjects, as the school authorities may determine.

In place of either two units of mathematics or two units of a foreign language, a substitution, if previously authorized by the State Board of Education, may be allowed of 2 units, consisting of a second unit of history and a second unit of natural science.

The privilege of making such substitution for mathematics or foreign language is accorded by the State Board to pupils as individuals, *not in classes,* and application for the same must come from the school authorities at the opening of the term. Blanks for this purpose are supplied by the Department of Public Instruction, on request.

HIGH SCHOOLS.

The high schools in Indiana are classified as follows: Commissioned, Certified, and Accredited.

I. COMMISSIONED. Commissions are issued by the State Board of Education to high schools upon inspection, provided they meet the following requirements:

a. Equipment.

1. Building.—The building must be of size sufficient to meet the needs without crowding, it must be properly heated and lighted, and it must have sanitary toilets.

2. Library.—The library must be equipped with good, trustworthy encyclopedias, reference books and books on general literature.

There must be enough books to meet the legitimate needs of good school work. The library must be a growing one, additions being made each year.

3. Laboratories.—The laboratory must be fully equipped to do well the sciences taught in the school. The laboratory, like the library, must grow each year.

b. Teaching and Teachers.

1. Teaching.—The teaching in the high school and also in the grades below the high school must be good.

2. Teachers.—At least two teachers must give all their time to high school work. One of the teachers in the high school must be a graduate of a standard four years' course in a standard college or a standard three years' course in a standard normal school, or the equivalent.

c. The Course of Study.

1. Length.—The minimum length of the course is thirty-two months. A high school can not be commissioned until it has maintained an eight months' term for three consecutive years, and its commission can not become effective until the senior class has had thirty-two months of high school work.

2. Subjects.—The course of study must provide for the subjects legally necessary, and such other subjects as local authorities deem advisable, and are approved by the State Board of Education.

3. Continuity.—A few studies pursued one, two or three years are preferable to many studies taken for short periods. No science should be taught for a term of less than one year.

4. Music and Drawing.—Provision must be made for systematic instruction in each of these subjects for one period a week or the equivalent throughout the course.

5. Agriculture or Industrial Training and Domestic Science must be taught five periods per week during one school year or the equivalent.

6. College Entrance.—All courses that prepare for college should provide for at least three years of foreign language.

d. Records.

1. Work.—Complete records must be kept, showing the academic progress of each pupil.

2. Advanced Standing.—When a pupil is admitted from another school the record must show what standing was given and why.

II. Certified. Certificates are issued by the State Department of Public Instruction to high schools upon information given on blank reports sent out for that purpose, provided such information shows that the high schools meet the following requirements:

a. Equipment.
   1. Building.—(Same as for a commissioned school.)
   2. Library.—(Same as for a commissioned school.)
   3. Laboratories.—(Same as for a commissioned school.)

b. Teaching and Teachers.
   1. Teaching.—(Same as for a commissioned school.)
   2. Teachers.—(Same as for a commissioned school.)

c. The Course of Study.
   1. Length.—The minimum length of the course is twenty-eight months. A high school can not be certified until it has maintained a term of seven months for three consecutive years. And the certificate can not become effective until the senior class has had twenty-eight months of high school work.
   2. Subjects.—(Same as for a commissioned school.)
   3. Continuity.—(Same as for a commissioned school.)
   4. Music and Drawing.—(Same as for a commissioned school.)
   5. Agriculture, Industrial Training and Domestic Science. —(Same as for a commissioned school.)

d. Records.
   1. Work.—(Same as for commissioned school.)
   2. Advanced Standing.—(Same as for a commissioned school.)

III. ACCREDITED. Every child in the State is entitled to free school privileges in both elementary and secondary schools. School trustees are required to furnish the opportunity for such training. When no high school privileges are offered by a corporation the trustee must grant transfers to pupils eligible to attend high school when requested to do so.

There is a large number of noncommissioned high schools in the State that are doing excellent work. In order that they may accomplish much good, and to obviate the burden of indiscriminate transfers, the following plans are recommended:

1. The principals of all the high schools in a county, both commissioned and noncommissioned, should meet and arrange a course of study for the noncommissioned high schools which will enable pupils to do two or three years' work in the noncommissioned high schools, receive full credit for time spent and work done, enter a

commissioned high school and complete the entire course in the same length of time that would have been required if all the work had been done in a commissioned high school.

This arrangement, of course, would be possible only when the term of the noncommissioned high school is for eight months or more.

2. In noncommissioned high schools having terms of less than eight months, arrangements should be made to have all high schools in the county begin at the same time, and the work of the noncommissioned high schools should be so arranged that the pupils can do six or seven months' work in the home school, receive a transfer to a commissioned high school and complete the year's work there.

Either of the foregoing plans will have the approval of the State Board of Education and such noncommissioned high schools, upon request, will be granted certificates of equivalency recognizing their work as the equivalent of the same amount of work done in a commissioned high school.

3. In counties where co-operation as outlined above is not easily effected, the work of noncommissioned high schools which maintain satisfactory standards will receive from the State Board of Education certificates of equivalency recognizing the work done as the equivalent of the same amount of work done in a commissioned high school. In schools where one teacher does all the high school work, not more than two years' work should be included in the course.

Adopted Text-books for High Schools.

	Contract Price.	Exchange Price.
Wells & Hart, New High School Algebra. D. C. Heath & Co.	$1 08	$0 72
Wentworth & Smith, Plane and Solid Geometry. Ginn & Company.	1 17	78
Webster's Ancient History. D. C. Heath & Co.	1 35	90
Harding's New Mediæval and Modern History. American Book Co.	1 35	90
James & Sanford's American History. Chas. Scribner's Sons	1 25	70
Garner's Government in the United States. American Book Co.	90	60
Thomas, Howe & O'Hair, Composition and Rhetoric. Longmans, Green & Co.	90	45
Moody, Lovett & Boynton, First View of English Literature and First View of American Literature (bound in one volume). Chas. Scribner's Sons	90	60
D'Ooge, Latin for Beginners. Ginn & Company.	90	60
Walker's Caesar, 4-book edition. Scott, Foresman & Co.	90	45
Walker's Caesar, 7-book edition. Scott, Foresman & Co.	1 13	75
Johnston & Kingery's Cicero, 6 orations. Scott, Foresman & Co	90	45
Johnston & Kingery's Cicero, 10 orations. Scott, Foresman & Co.	1 13	75
Knapp's Vergil. Scott, Foresman & Co.	1 26	84
Bennett's Latin Grammar. Allyn & Bacon.	72	40
Bennett's New Latin Composition, Complete. Allyn & Bacon.	90	60
Vos, Essentials in German. Henry Holt & Co.	80	54
Walter & Krause, Beginner's German. Chas. Scribner's Sons	90	60
Dryer's High School Geography, Complete. American Book Co.	1 17	78
Adams' Commercial Geography. D. Appleton & Co.	1 07	53
Modern Commercial Arithmetic. Lyons & Carnahan	75	42

	Contract Price.	Exchange Price.
Bergen & Caldwell, Practical Botany. Ginn & Company	1 22	78
Coulter's Text Book of Botany. D. Appleton & Co.	1 03	51
Coulter's Plant Life and Plant Uses. American Book Co.	1 08	72
Andrews' Practical Course in Botany. American Book Co.	1 12	75
Andrews' Practical Course in Botany with Flora. American Book Co	1 35	90
Linville & Kelly's General Zoölogy. Ginn & Company	1 41	90
Davenport's Elements of Zoölogy. Macmillan Co.	97	66
Colton's Descriptive and Practical Zoölogy. D. C. Heath & Co	1 35	90
Jordan-Kellogg & Heath's Animal Studies. D. Appleton & Co	1 03	51
Gorton's High School Course in Physics. D. Appleton & Co	1 03	51
Black & Davis, Physics. Macmillan Co	1 10	75
Hoadley's Elements of Physics. American Book Co.	1 08	72
Millikan & Gale, A First Course in Physics (Revised). Ginn & Company	1 18	75
Bradbury's Inductive Chemistry. D. Appleton & Co.	1 03	51
Brownlee's First Principles of Chemistry. Allyn & Bacon	1 13	75
McPherson & Henderson, An Elementary Study of Chemistry. Ginn & Company	1 18	75
Hessler & Smith's Chemistry. Benj. Sanborn & Co	1 13	75

Course of Study.

	1st Year	2nd Year	3rd Year	4th Year.
English 3 Units Required	Classics Grammar Comp. & Rhet PU	Classics Comp. & Rhet BLIC	Classics Comp. & Rhet Literature SPEAK	Classics Comp. & Rhet Literature ING
Foreign Language 2 Units Required	Latin or German	Latin or German	Latin or German	Latin or German
Mathematics 2 Units Required	Algebra	Algebra — Geometry	Geometry	Com'l Arith.
History 1 Unit Required		Ancient History	Mediæval — Modern	U.S. History — Civics
Science 1 Unit Required	Botany or Zoology	Physical or Comm. Geog.	Physics	Chemistry
MUSIC	Credit ¼	Credit ¼	Credit ¼	Credit ¼
DRAWING	" "	"	"	"
Man. Tr. Boys	" "	"	"	"
Dom. Sci. Girls	" "	"	"	"
Agriculture	" "	"	"	"

Required for graduation

Must be offered in all commissioned and certified high schools.

One years work must be offered in prevocational work, Agriculture or Industrial Work for boys and Domestic Science for girls.

This work may be done as full time work for one year; or part time work for four years

No credit to be given until full years work is completed.

COLLEGE ENTRANCE REQUIREMENTS IN INDIANA.

	Total for Entrance.	Eng.	Math.	For. Lang.	Science.	Hist. and Civ.	Draw.	Elective.
I. U.	16	3	3	3 or 4	1	1	0	5
Purdue	15	3	2½	2	1	1	..	5½
Butler	15	3	2½	3	1	1	..	4½
DePauw	15	3	3	3	0	2	..	4
Earlham	15	3	2	2	1	1	..	6
Franklin	15	3	2	2	1	1	..	6
Hanover	15	3	3	3	1	1	..	4
Notre Dame	16	4	2	7	1	2	..	0
Wabash	16	3	3	3	1	1	..	5

The above is taken from U. S. Bulletin "College Entrance Requirements."

Pupils planning to attend any particular college should write for specific information regarding the elective units they wish to offer for entrance.

The requirements of the Indiana colleges are similar to those of other states.

Daily Program.

The question of the daily program is one of much concern to the teacher and of importance to the school.

The arrangement of time for the various subjects including the prevocational work has been investigated by a committee working with the department.

It is generally conceded that the best we can do with two teachers is the minimum of elective work and careful attention to combining classes and alternating subjects.

Where this is done there should be conferences with the county superintendent and the various schools concerned, to the end that courses in related schools may be of mutual benefit. Combinations of classes in English, Science and History are most easily effected.

The following program is working in one of our small schools and is given with the idea that it will suggest a solution of the problems of other schools of this type.

Of course the program for the first term will vary from that of the second term of school in each year.

Hour.	Time.	Teacher—Mr. A.	Mr. B.	Mr. C.
A. M. 1	.. .to....	German 1.	History 2 and 3.	
2	....to....	English Literature 4.	Algebra 2.	
3	....to....	Agriculture 3 and 4. Laboratory.		Chorus.
4	....to....		U. S. History 4.	

Domestic Science. NOON INTERMISSION.

P. M. 1	....to....	American Literature 2 and 3.		Drawing.
2	....to....	Composition 1.	Commercial Arithmetic 3 and 4.	
3	....to....	Laboratory. Physics 4.	Latin 2.	
4	....to....		Algebra 1.	

The following program from a three-teacher commissioned high school shows the possibilities of meeting the requirements with the teachers giving six hours daily to recitation work.

This plan admits of wide variation and has many good suggestions.

In schools of this class only one foreign language should be attempted. Election of languages is desirable only when adequate teaching force is provided to carry out election of studies in the various other lines.

DAILY PROGRAM—THREE TEACHERS.

Hour.	Time.	Teacher—Mr. A.	Mr. B.	Mr. C.
A. M. 1	....to....	American Literature 2 and 3.		Algebra 1.
2	....to....	U. S. History 4	Latin 2	Botany 1.
3	....to....		Domestic Science Laboratory.	Laboratory.
4	....to....	History 2	Domestic Science 3 and 4.	Agriculture 3 and 4.

NOON INTERMISSION.

P. M. 1	....to....	Composition 1	Music.	
2	... to....		Latin 3 and 4.	Geometry or Algebra 2.
3	....to....	Drawing.	Latin 1.	Geometry 3.
4	....to....	English Literature 3 and 4.		Manual Training 1 and 2.

NOTE—Indicate at top the teacher's name. In each space indicate what the teacher has at the hour indicated at the left. Give subject taught, grade, and number in the class as Latin, Ib, 25. Show laboratory periods in science and vocational work.

Music and Drawing are offered ..... hours per week.

The following four-teacher high school program is suggestive in that all the music, drawing and part time subjects are taken the first hour in the day and regular work is done in prevocational subjects each day. This is adapted to schools where it is deemed desirable to give this work regular standing for full credit.

It is to be held in mind that these programs are intended to be suggestive and that the best interests of the schools require that they be adapted to local needs and conditions.

DAILY PROGRAM.

Hour.	Time.	Teacher—Mr. A.	Mr. B.	Mr. C.	Mr. D.
A. M. 1	..to..	Music 9, 10, 11, 12 Monday. Music 10, 11, 12 Wednesday.	Chorus, Music 9 Tuesday. Spelling 9 Wednesday.	Spelling 10, 11, 12 Tues. and Thurs. Drawing 9, 10, 11, 12 Friday.	
2	..to..	Physics 12.		English 9.	German.
3	..to..	Laboratory.	Sewing 9.	Algebra 11.	German.
4	..to..		Sewing 10. Manual Training 9.	Geography 12.	

NOON INTERMISSION.

P. M. 1	..to..	Botany 9.	Manual Training 10 and 11.		German.
2	..to..	Laboratory.	English 11.	History 12.	English 10.
3	..to..	English 12.		History 11.	German.
4	..to..		Sewing 11.	Algebra 10.	German.

ENGLISH.

(Three Units Required.)

The English course in the high school should accomplish definite results in the ability of the pupil to observe and study accurately, to speak fluently and logically, and to write so as to convey thought clearly and in the best language.

There is a tendency in the high school to neglect the oral expression of the pupils and place the entire emphasis upon written work. It is therefore, recommended that more attention be given to oral reading and that an outline in public speaking be made to correlate with the English work, and aid the pupils in expressing themselves readily and easily in public. This course should not have for its aim the making of finished public speakers, but an education that will give to the student, voice control, good carriage, ease in oral expression, and an ability to think quickly and respond readily in conversation.

It is also recommended that constant attention be given by the English teacher to correlating the English work with the other subjects of the curriculum, and with modern life.

Aims in English.

Outline.[1]

I. In general, the immediate aim of secondary English is twofold:

(*a*) To give the pupil command of the art of expression in speech and in writing.

(*b*) To teach him to read thoughfully and with appreciation, to form in him a taste for good reading, and to teach him how to find books that are worth while.

These two aims are fundamental; they must be kept in mind in planning the whole course and applied in the teaching of every term.

[1] This outline, here considerably modified, was originally prepared by Allan Abbott, of the Horace Mann School, Columbia University, and appeared in the English Journal for October, 1912. It is recommended by the N. E. A. Committee on Reorganization of Secondary Education.

II. Expression in speech includes:

(*a*) Ability to answer clearly, briefly, and exactly a question on which one has the necessary information.

(*b*) Ability to collect and organize material for oral discourse.

(*c*) Ability to present with dignity and effectiveness to a class, club, or other group material already organized.

(*d*) Ability to join in a conversation or an informal discussion, contributing one's share of information or opinion, without wandering from the point and without discourtesy to others.

(*e*) Ability (for those who have or hope to develop qualities of leadership) to address an audience or conduct a public meeting, after suitable preparation and practice, with proper dignity and formality, but without stiffness or embarrassment.

(*f*) Ability to read aloud in such a way as to convey to the hearers the writer's thought and spirit and to interest them in the matter presented.

NOTE.—All expression in speech demands distinct and natural articulation, correct pronunciation, the exercise of a sense for correct and idiomatic speech, and the use of an agreeable and well-managed voice. The speaker should be animated by a sincere desire to stir up some interest, idea, or feeling in his hearers.

III. Expression in writing includes:

(*a*) Ability to write a courteous letter according to the forms in general use, and of the degree of formality or informality appropriate to the occasion.

(*b*) Ability to compose on the first draft a clear and readable paragraph or series of paragraphs on familiar subject-matter, with due observance of unity and order and with some specific detail.

(*c*) Ability to analyze and present in outline form the gist of a lecture or piece of literature, and to write an expansion of such an outline.

(*d*) Ability, with due time for study and preparation, to plan and work out a clear, well-ordered, and interesting report of some length upon one's special interests—literary, scientific, commercial, or what not.

(*e*) Ability (for those who have literary tastes or ambitions) to write a short story or other bit of imagi-

native composition with some vigor and personality of style and in proper form to be submitted for publication, and to arrange suitable stories in form for dramatic presentation.

NOTE.—All expression in writing demands correctness as to formal details, namely, a legible and firm handwriting, correct spelling, correctness in grammar and idiom, and observance of the ordinary rules for capitals and marks of punctuation; the writer should make an effort to gain an enlarged vocabulary, a concise and vigorous style, and firmness and flexibility in constructing sentences and paragraphs.

IV. Knowledge of books and power to read them thoughtfully and with appreciation includes:

(*a*) Ability to find pleasure in reading books by good authors, both standard and contemporary, with an increasing knowledge of such books and increasing ability to distinguish what is really good from what is trivial and weak.

(*b*) Knowledge of a few of the greatest authors, their lives, their chief works, and the reasons for their importance in their own age and in ours.

(*c*) Understanding of the leading features in structure and style of the main literary types, such as novels, dramas, essays, lyric poems.

(*d*) Skill in the following three methods of reading, and knowledge of when to use each:

(1) Cursory reading, to cover a great deal of ground, getting quickly at essentials.

(2) Careful reading, to master the book, with exact understanding of its meaning and implications.

(3) Consultation, to trace quickly and accurately a particular fact by means of indexes, guides, and reference books.

(*e*) The habit of weighing, line by line, passages of especial significance, while other parts of the book may be read but once.

(*f*) The power to enter imaginatively into the thought of an author, interpreting his meaning in the light of one's own experience, and to show, perhaps, by selecting passages and reading them aloud, that the book is a source of intellectual enjoyment.

NOTE.—All bookwork should be done with a clear understanding on the student's part as to what method of reading he is to use and which of the purposes mentioned above is the immediate one. To form a taste for good reading it is desirable that a considerable part of the pupil's outside reading be under direction. To this end lists of recommended books should be provided for each grade or term. These lists should be of considerable length and variety, to suit individual tastes and degrees of maturity.

V. The kinds of skill enumerated above are taught for three fundamental reasons:

(*a*) Cultural. To open to the student new and higher forms of pleasure.

(*b*) Vocational. To fit the student for the highest success in his chosen calling.

(*c*) Social and ethical. To present to the student noble ideals, aid in the formation of his character, and make him more efficient and actively interested in his relations with and service to others in the community and in the nation.

NOTE.—These fundamental aims should be implicit in the teacher's attitude and in the spirit of the class work, but should not be explicitly set forth as should the immediate aim of each class exercise.

That the work in English may cultivate habits of accuracy, develop appreciation of the beauty of language, and secure to the pupil an enlargement and an enrichment of the ideals of life, it is advisable that each teacher of the subject consciously emphasize three distinct phases of English instruction, i. e., (1) Literature; (2) Grammar; (3) Composition.

Literature.

One field that the English course designs to cultivate is literary appreciation. In developing this, the essential thing is the comprehension of the selection as a whole,—its theme, its spirit, its vital reaction. As a means of securing this, special attention must be given to memory assignments; to the meanings of words, phrases, and figures; to the explanation of allusions; to the study of character; to the development of the plot; to the re-creation of sensory effects, and to the vitality of subjective reaction. All dictionary work and all analytic processes must, however, be wisely subservient to the desired end. On the pupil's way to the ultimate goal,—appreciation,—an over-minute consideration of detail must not cloud; a lack of consideration of detail must not impede.

In the literature work, as well as in the composition work, there is constant insistence on accuracy. To secure this, the student must often surrender himself to severe task assignments. He will learn that the highest joy in his work comes in conquering difficulties rather than in loitering through primrose paths of dalliance. Some of the severe discipline of life may wisely be learned in the high school.

Throughout the entire English course emphasis is laid upon memory assignments. As Matthew Arnold suggests, these memorized selections may be happily used in measuring the worth of other poetry. Nor should the assignment be limited to verse form; wisely selected prose passages thoroughly memorized may secure a ready response in the learner's style. The help which memory work offers the spirit is likewise apparent. It gives the student standards of moral judgment. The course should direct toward the development of character.

Constantly the literature period allows the emphasis upon principles of conduct. Lessons in patriotism, courtesy, sincerity, the honest performance of the daily task,—these may direct toward the highest work of the school,—the development of a sterling character.

The successful following of these principles implies that the teacher of literature should be thoroughly imbued with a love of literature and an understanding of life. He should cultivate that large and sympathetic view which veers away from narrowness and directs toward the universal. He should seek constantly to store his mind with knowledge that may at will be summoned to interpret and impart the thoughts in the assigned selection. Intelligent appreciation and such a skill in imparting as will arouse the interest and enthusiasm of pupils are pedagogical requisites in efficient English teaching.

SPECIFIC SUGGESTIONS.

1. Consider the selection as a whole.
2. Insist upon good oral reading.
3. Encourage outside reading.
4. See that new words mastered in the literature lesson reoccur in the pupil's composition.
5. Encourage discussion that will bring out individual opinions. Show respect for these opinions.
6. Try to make the selection leave a definite impression upon the mind of each pupil.
7. Call attention to words that give strong sensory impressions,—words that make appeals to the sense of sight, hearing, feeling, odor, taste.
8. Assign definite passages of prose and poetry for memory work.
9. Emphasize those topics that tend to develop strength of character.

The Course in Detail.

FIRST YEAR.

First Term—

Franklin: "Autobiography."
Longfellow: "Tales of the Wayside Inn" and other narrative poems.
Dickens: "Christmas Carol."

Second Term—

Scott: "Marmion."
Hawthorne: "Twice Told Tales."
Irving: "Sketch Book."

SECOND YEAR.

First Term—

Macaulay: "Lays of Ancient Rome."
Washington: "Farewell Address."
Shakespeare: "Midsummer Night's Dream."

Second Term—

Stevenson: "Treasure Island."
Burns: "Cotter's Saturday Night."
Goldsmith: "Deserted Village."

THIRD YEAR.

First Term—

Addison: "Sir Roger de Coverley Papers."
Lowell: "Vision of Sir Launfal."
Burroughs: "Birds and Bees."

Second Term—

Dickens: "Tale of Two Cities."
Tennyson: "Idylls of the King."

FOURTH YEAR.

First Term—

Milton: Minor Poems.
Shakespeare: "Macbeth."

Second Term—

Byron: "Childe Harold."
Lincoln: "Gettysburg Address."
Lowell: "Present Crisis."

A study of the history of American and English Literature should accompany the study of the classics. (Text: Moody, Lovett and Boynton.)

Supplementary Reading.

I.

Hale: "A Man Without a Country."
Gaskell: "Cranford."
Hughes: "Tom Brown at Rugby."
Cooper: "Deerslayer."
Poe: "Gold Bug."
Hawthorne: "House of Seven Gables."

II.

London: "Call of the Wild."
Stevenson: "Prince Otto."
Tennyson: "Princess."
Irving: "Life of Goldsmith."
Alcott: "Little Women."
Scott: "Kenilworth."

III.

Swift: "Gulliver's Travels."
Bunyan: "Pilgrim's Progress."
Dickens: "Old Curiosity Shop."
Lytton: "Last Days of Pompeii."
Thackeray: "Vanity Fair."

IV.

Kingsley: "Westward Ho."
Thackeray: "Pendennis."
Hughes: "Tom Brown at Oxford."
Eliot: "Mill on the Floss."
Shakespeare: "As You Like It."
Readings from Bible: Genesis, Samuel, Ruth, Esther.

Composition and Rhetoric.

(Based upon Thomas and Howe Text.)

Grammar.

It is a mistake for the high school teacher to assume that the teaching of grammar is not his proper function. Even though the instruction in grammar in the graded schools has been particularly efficient, there is in the composition classes of the high school constant need for a review of grammatical principles, and there is likewise constant opportunity for further systematic progress in the study.

Review is necessary in order to avoid educational waste. The teacher in his use of technical terms must see that his instruction is being understood.

There will be need, too, for further advance in grammatical knowledge. When the teacher feels, for instance, that the composition work of his class can be strengthened by teaching the difference between *coördinating* and *subordinating* connectives, he will pause in his work and throw emphasis upon that distinction. And he will not hesitate to do this even though he is put to the exertion of teaching a distinction which the pupils in the graded schools may never have learned.

Composition.

The definite aim in composition teaching is to enable the pupil to speak and to write in strong, simple, clear, and correct English. Having secured from a majority of his pupils habitual strength, simplicity, clearness and correctness, the teacher may study the advisability of trying to arouse in a few of the more select and capable the additional element of charm.

The work in composition is of two sorts—oral and written—each graded in such a way as to accord with the mental equipment of the pupil and at the same time inspire a healthy reach. Inasmuch as the pupil's English is far more frequently employed in oral rather than in written expression, we find it profitable to emphasize systematic work in oral composition. Now oral composition, as thus considered, is not applied to the short, fragmentary sentences that pupils use in play or among unconventional surroundings; it is applied to longer, more connected speech,—incidents, reproductions of stories, character-sketches, explanations, topics in history and in science,—any oral account, in short, that is

large enough in scope to demand attention to its form and structure. In this drill, however, the emphasis is not merely upon English form and structure. Effective teaching here demands criticism upon the proper pronunciation of words, clear enunciation of syllables, posture, ability to stand before the class and look the members in the eye,—any of those characteristics, indeed, which aid in the oral delivery of thought.

The sort of structure which drill in oral composition secures —except, perhaps, in the advanced grades—can never be other than simple. In the aim toward the more elaborate, the valuable disciplinary implement that directs toward accuracy is the written composition. Here the form is neither fragile nor evanescent. The pupil's production is before him and before his teacher. By each it may be critically examined. The teacher first points out the errors in spelling, in grammar, in simple rhetoric. Then, as a means of securing broad ideas of structure, the pupil is taught to ask himself three important questions. Of the whole composition, of each paragraph, of each sentence, he asks: (1) Is it unified? (2) Is it coherent? (3) Is the emphasis proper?

Structure, however, is not the only thing a composition should possess. It must first of all possess vitality. This quality can more readily be secured—especially in the earlier grades—by assigning simple subjects from daily life, such as My Experience With a Dog, How I Should Like to Spend the Holidays.

Perhaps most of the requirements of the teacher's task in oral and written composition will be met if the five following general suggestions are fully comprehended and carefully followed:

General Suggestions.

1. Develop a sense for form and organization.
2. Encourage a free and facile expression of the pupil's interest. Use this means to enlarge the pupil's vocabulary.
3. Develop the pupil's power to observe closely.
4. Allow the other studies in the curriculum to contribute to the composition work. Encourage all the teachers of other subjects in the school, constantly, to demand good written and spoken English from their pupils.
5. Criticise constructively and sympathetically—as much by personal conference as possible.

As corollaries to these the following specific suggestions are added:

SPECIFIC SUGGESTIONS.

1. Insist on the use of black ink.
2. Insist on the use of uniform paper.
3. Refuse to accept careless penmanship, or crumpled papers.
4. Demand that the theme be ready on the day assigned.
5. Correct and return the themes regularly.
6. The pupil will take more interest if his work is graded; for example, A = excellent; B = good; C = fair; D = unsatisfactory.
7. Teach the pupil to correct his theme carefully before handing it in. Let him learn, as Professor Barrett Wendell has expressed it, that paragraphs and whole compositions are matters for prevision, but that sentences are matters for revision.
8. Faulty and careless themes should be rewritten.
9. Corrected themes should be enclosed within the rewritten themes.
10. For detailed suggestions on oral composition work, read the chapter on Oral Composition in Thomas and Howe's *Rhetoric and Composition.*
11. Letters may be written in each year. It is a good plan to have them handed in on letter paper, in envelopes properly addressed. Insist on a good quality of stationery. Discourage fancy colors. Write on consecutive pages, as a book is printed.
12. The teacher who helps the child to think clearly will be helping him to write and speak clearly.
13. Make free use of the blackboard. To criticise before the class a theme previously written out on the board, will save many hours of correction.

The Course in Detail.

FIRST YEAR.

Composition.

Short weekly themes. The primary aim is to encourage spontaneity, but emphasis is strongly laid on mechanical items,—neatness, indentation of paragraphs, spelling, grammatical forms, and the study of such simple rhetorical principles as *The Whole Composition, The Sentence, Words,* and the simpler principles of *Narration, Description,* and *Letter Writing.* In the oral composition work the pupil stands before the class, and when he has finished his theme receives the comments of his teacher and classmates. In addition to the observations of those principles which govern effective written discourse the speaker is expected to stand erectly, to enunciate distinctly, and to guard carefully against mistakes in the pronunciation of words. Chapters I, III, IV, VI, VIII, X, and XI of Thomas and Howe's *Rhetoric and Composition* are carefully studied. Attention is likewise directed to the main points in Chapters II, V, VII (Narration and Description), and IX.

SECOND YEAR.

Composition.

Weekly themes. Emphasis falls upon the study of the paragraph. The student learns that paragraphs may be developed by certain specific methods,—by *details,* by *one specific example,* by *comparison,* by *contrast,* by *cause and effect,* by *proofs,* by *repetition.* The principles governing effective *Narration* and *Description* are carefully studied and applied. There is constant insistence upon correct and effective sentence structure and upon care in the choice of words. In both the oral and the written composition a higher efficiency is constantly expected. All the chapters of Thomas and Howe's *Composition and Rhetoric* studied in the first year are carefully reviewed. Particular stress falls upon Chapters II, IV, V, VI, VII (Narration and Description), and VIII and IX.

THIRD YEAR.

Composition.

The Whole composition; review of the Sentence and the Paragraph; review of Narration and Description, with special attention to Exposition. There is constant practice in Oral Composition; debating is strongly encouraged. In this year's work special em-

phasis is placed upon the selection and organization of material for the longer theme. Palmer's *Self-Cultivation in English* is used as a model for this work. An attempt to write verse is an aid to the appreciation of poetry, and it is freely encouraged. All the chapters of Thomas and Howe's *Composition and Rhetoric* previously studied are reviewed. Emphasis falls upon Chapter VII, particularly upon that portion which relates to Exposition.

Suggestions for Home Reading.—William Morris: *Sigurd the Volsung;* Blackmore: *Lorna Doone;* Thackeray: *Vanity Fair;* Scott: *Guy Mannering;* Dickens: *David Copperfield.*

FOURTH YEAR.

Composition.

A careful review of Narration, Description, and Exposition. Special attention to Argumentation. Continued emphasis upon Oral Composition. Review of all the chapters of Thomas and Howe's *Composition and Rhetoric,* with special emphasis upon Chapter VII, particularly the portion which relates to Argumentation.

HISTORY AND CIVICS.

(One Unit Required.)

"Where only one year is given the work shall consist of American History and Civics—3rd or 4th Year."

While the Course in history has been outlined for the first three years, it may be used for the second, third and fourth years in schools omitting the study of history in the first year.

No group of studies surpasses in importance that of the social sciences. In the present organization of the school course, history and civics furnish the basis and the opportunity for the study of men in social relationships.

To bring the life and experience of men in past ages to bear in a vital way upon the present, to give insight into the forces operating in human society and secure intelligent co-operation therein, to awaken civic consciousness and promote civic responsibility, to cultivate the power of "thinking historically"—thinking, that is, in terms of causation, of evolving changes, with the exercise of the critical faculty upon the sources of information—these are among the results to be secured in teaching history in high schools. While the aim is not so much mere mastery of detail as to discover the larger trend of things, yet there should be sufficient study and mastery of facts to give a sure basis for sound conclusions and for interpretation of historical movements.

Conscious connection should be frequently established between past times and present day life and affairs. In this way, the facts of history are vitalized and the life of the present is illumined. Possible connections are without number for the alert and observant teacher. For example, the administration of a Roman province may be fruitfully compared with that of the Canal Zone in our day. The Roman system of land surveys sheds important light upon the system introduced into this country by Thomas Jefferson. Parallels between historical personages in widely separated times and countries, between living statesmen and those of past ages, are, if not strained and overdone, highly suggestive and stimulating. The connection or comparison should be something more than a

casual one and should be drawn by the pupil with some degree of fulness and clearness of detail.

Pupils should be encouraged to express freely their opinions upon the actions of men in the past. In this way valuable training for civic affairs is obtained and much of the drudgery inevitable in the mastery of facts is relieved. Full and free discussion of the merits of leaders and public policies, of the comparative benefits of opposing lines of action, may with profit be provoked. Was Jackson justified in his suspicions of the Bank? Did the benefits of Napoleon's constructive statesmanship outweigh possible evils of his military career? Was Jefferson's policy of avoiding war at any cost an expedient one? Care should be taken that all sides of a question are brought into the light. Hasty and ill-formed judgments should be carefully guarded against.

Interest in the romance and the pageantry of history may well be fostered in adolescent minds. The dramatic episodes, the great crises in human affairs, the wonderfully thrilling moments in the career of some great leader, should be utilized to the utmost in stimulating interest and nourishing the imagination.

Topical analysis should form the basis of instruction. This differs greatly from the so-called "reciting by topics." The latter may and often does degenerate into mere reciting of paragraphs in a textbook. Topical analysis means the logical and systematic grouping of facts about a central topic. This brings into clear perspective the causal and logical aspects of a subject. Even purely narrative and chronological subjects should be reduced to the topical form. Thus, the facts of a military campaign may be so arranged. Stories, anecdotes, narratives may be introduced into the topical study by way of illustrating or re-enforcing a point. A series of lessons may be so planned as to bring out the salient facts of a large topic, an historical movement or an institution. When such a subject has been completed by the class, each student should gather up, in a carefully written topical outline, the elements of the subject. Such a summary outline constitutes a valuable synthesis and serves to "clinch" the subject.

Of all subjects history demands extensive *reading*. The amount and character of collateral reading should be carefully graded to the ability and advancement of the class. Beginners in history classes should be cited to specific portions, of limited extent, and should be early instructed in the mechanics of books, using the textbook for practice,—in the purpose and use of footnotes, mar-

ginal references, index and pronouncing vocabulary, title-page, and the like. Evaluation of authors should constantly be inculcated. Digests and excerpts from the reading may be entered in notebooks and referred to in the discussions in class.

Some provision should be made, in the course of instruction, for *written reports* or *theses.* The thesis is a valuable device for securing accuracy of statement and fact. Citation by author, title, and page should be insisted upon, and instruction given in compiling bibliography and in taking notes in preparation for the thesis. The subjects should be chosen directly from the field of work and should involve a question or problem to be answered. A few written theses (two or three per term) rather than too frequent, are desirable, and these may be fairly extended in treatment. This work may be readily correlated with theme work in English.

Constant effort is needed to give a *sense of reality* to the history of past times. For younger students, visualizing the facts of history is helpful. *Maps* for physical setting, political relations, and economic or industrial conditions, are visualized forms of historical data. *Pictures* are even more graphic representations of restricted phenomena. These may be obtained in inexpensive form from old magazines and mounted on cardboard. Cheap prints may be obtained from the dealers. Pictures in the textbooks should be utilized to the full. *Source selections,* if properly chosen, often lend a sense of reality and give vivid portrayal of conditions. Letters, memoirs, diaries and journals are usually rich in interesting materials. For historical atmosphere and color, the best *historical novels* may be commended. Under the magic wand of the artist writer, type characters and real leaders take on life and action and are endowed with emotion and actuated by motives.

The following *books for the teacher* may be recommended: Committee of Seven, "Study of History in Schools;" Bourne, "Teaching of History and Civics;" Hartwell, "Teaching of History;" New England Association Committee, "A History Syllabus for Secondary Schools" and "Historical Sources for Schools;" Committee of Five, "Study of History in Schools."

THE COURSE IN DETAIL.

First Year.

(Webster's Ancient History.)

Pedagogical Apparatus.

The teacher will in the first place undertake a careful examination of the "Suggestions for Further Study" (Webster's *Ancient History,* pp. 20 to 28), where detailed references are made to the most useful aids to historical instruction, such as encyclopedias, atlases, wall maps, illustrations, works of travel and historical fiction, source collections, and modern books.

The "References" preceding each chapter of the text are intended to supply adequate material for the pupil's collateral reading. Emphasis should naturally be placed on the study of the sources, when these can be presented in an interesting and intelligible fashion. The use of Webster's *Readings in Ancient History,* or of the excellent collections of extracts by Botsford and Davis, will go far toward remedying the lack of library facilities.

The collateral reading will usually furnish sufficient material for the preparation of brief essays or written reports. No better means exists of correlating the training in history and English. In such work it is highly desirable that the pupil be required to state exactly (by author, title, volume, and page) where he obtained his information. Not all reports need be written out. Some salient incident, some happy anecdote, some piece of vivid description can be assigned to students for oral presentation in the classroom, in this way providing effective training in extemporaneous discourse.

The "Studies" are most conveniently used for review purposes upon the completion of each chapter of the text. It will be observed that nearly all of these take the form of suggestive questions and should arouse stimulating discussions in the classroom. The alert teacher will be able to add more material of the same sort—questions which do not test the memory, only, but also stir the sluggish mind, provoke debate, and lead to constructive thinking. The other "Studies" include: (1) exercises requiring the use of outline maps and of maps in the text; (2) selections of important dates to be memorized; (3) lists of technical terms and of English words and expressions derived from the classical languages; and (4) questions based upon particular illustrations in the textbook.

The use of permanent notebooks with detachable leaves will greatly facilitate the work of historical instruction. In such note-

books pupils should be expected to insert abstracts of their collateral reading; short but significant passages copied from other books; any essays or written reports they may compose; lists of dates, technical terms, prominent personalities, and important places; digests or outlines of particular chapters of the textbook; and finally, all maps which may be prepared from time to time. Notebok keeping is usually enjoyed by students; indeed, the chief danger is that they may come to regard their notebooks as fetishes and devote to them time and energy which would better be spent in supplementary reading.

CONSIDERATIONS FOR THE TEACHER.

The elaborate topical analysis of the book—19 chapters, each a topic in itself, 235 sections, each a topical subdivision, and box notes for every paragraph—should facilitate the mastery of the text and its subsequent review. It should be noted that the Table of Contents includes the title of every numbered section and thus provides a helpful outline of the entire work.

Maps and illustrations form an integral part of the text for purposes of study and recitation. These are constantly referred to in the footnotes, in the "Studies," and in the Index and Pronouncing Vocabulary. Notice, particularly, that the illustrations are closely correlated with the reading matter and that they are intended not to ornament it but to supplement it. The descriptive caption immediately under each illustration, setting forth its special significance, should be carefully read by students.

The Table of Events and Dates furnishes a chronological conspectus of the entire field. The specially important dates chosen for memorization are here italicized. This table should be also useful in bringing out clearly *contemporaneous* events in Oriental countries and in Greece and Rome.

The very full Index and Pronouncing Vocabulary indicates the pronunciation of all difficult proper names, according to the system of diacritical marks found in the latest edition of Webster's *New International Dictionary*. It is desirable that pupils be carefully trained on these signs and sounds, for good work done here will encourage the habit of consulting a dictionary in connection with any reading, historical, scientific, or literary.

Footnotes are to be read, not skipped; and all cross-references to other pages of the text and to maps and illustrations should be looked up with scrupulous care by the pupil.

Outline.

The first nine chapters, devoted to prehistoric times, the Oriental countries, and to Greece, include about half of the book and may well constitute the first semester's work. Chapters X-XVII, dealing with Rome, will naturally form the basis for the work of the second semester, while the two remaining chapters on the private life and art of the classical peoples furnish a means of concluding the course with a survey of those features of ancient civilization shared in common by Greeks and Romans. Some teachers may prefer to take up Greek private antiquities and art at the close of the political history of Greece (ending with Chap. IX.) Similarly, the study of the sections of Italian geography in Chapter IV may be postponed, by those who prefer the traditional order, until Chapter X is reached. The arrangement in the text has, however, the very great advantage of emphasizing the real unity of classical civilization. It is a serious mistake to treat Greek history and Roman history as separate entities, instead of regarding them as related and interdependent aspects of one historical evolution localized in the Mediterranean basin.

The first chapter on "The Ages before History" contains a somewhat extended presentation of prehistoric and primitive culture, as providing an indispensable basis for all historical studies.

The Oriental period, instead of being broken up into a large number of chapters without inner connection, should be regarded as a unit, and its history, both political and cultural, should be outlined in such a way as to make an impression of unity on the student's mind.

The period from 395 A. D. to 814 A. D., covering the Germanic invasions and the formation of Germanic kingdoms, should be discussed briefly and should be presented as the tapering-off of ancient history. Emphasis ought to be placed, therefore, on those features of Græco-Roman civilization which survived the shock of the barbarian inroads and became the basis of the civilization of the Middle Ages. Topics such as Mohammedanism, the Papacy, and Monasticism, while they fall chronologically within this period, are essentially a part of medieval history, and their study may be properly postponed till the second year of the course.

Second Year.

MEDIEVAL AND MODERN HISTORY.

(Text: New Medieval and Modern History—Harding.)

A study of the factors in the making of the Europe of today.

A preliminary study of the geographical basis, giving the salient physical facts which have shaped European history; of the factors with which the Middle Ages started, especially the decaying Roman civilization, the Teutonic nations, and the rising Christian church; of the restored empire under Charlemagne.

The earlier portion of the year should be devoted to (1) the characteristic medieval institutions, such as the Church, feudalism, empire and papacy (and the conflict between the two); (2) the great continental movements, such as the Norse invasions, the Crusades, and the rise of nation states; (3) the life and culture of the Middle Ages,—of the peasants, the nobles, and the townsmen, and of the Universities; (4) the rise of England and France, and the Hundred Years' War.

The period of the Renaissance and Reformation is an epoch of tradition and (together with the resulting wars of religion) should be treated as a unit. Only the salient features should be dwelt upon, and these should be made as concrete as possible by means of pictures, stories, documents, and so on. Care must be exercised in touching upon the religious controversies of the Reformation period, yet something of the great divisions which arose should be brought out. Great tact and restraint must be exercised to avoid needlessly offending religious susceptibilities.

The last half year should be given to the period since 1648. Prior to the French Revolution, the important topics are the Age of Louis XIV, the struggle for constitutional liberty in England, the rise of Prussia, and the colonial rivalry of France and England. The characteristics of the Old Régime should form a setting for the study of the French Revolution. The latter should be seen as a great and successful social upheaval, and should not be limited to the Reign of Terror. Napoleon's career should be viewed in relation to the French Revolution. The growth of national unity and the spread of democracy are the characteristic movements of the nineteenth century. Much emphasis should be placed upon the social, industrial, and economic changes of recent times.

Third Year.

United States History and Civics.

Since only one year is given to both the subjects of American History and Civics, it is recommended that the former be given a place on the program three days of each week and the latter two days of each week, throughout the entire year. With this plan it will not be possible to cover all the subject matter included in these texts, and it is suggested that all the chapters of the books be covered, but in each only a few topics selected for full treatment.

In the outline the important topics of each chapter are mentioned and particular attention is called to those features that deserve especial emphasis. In the study of these subjects do not permit mere memorization of the text, but work for an understanding of it.

Emphasize the reasons for events and legislation. Allow full discussion and expression of opinion. Use maps constantly in the history work; do not discuss an event until its location has been determined. Wherever possible, connect all topics with present day conditions and occurrences.

COURSE IN DETAIL (UNITED STATES HISTORY.)

First Year.

(Text: American History—James and Sanford.)

First Term

Chapters I-XVI.
Three Recitations per week.

The Discovery of America. (Chapter I.)

Show how ancient ideas of the earth developed through many centuries. Conditions leading to the discovery of America are important; at this point, review European history previously studied. How the name America came to be given, first to South America. Explain the maps on page 13.

Spanish Exploration and Colonization. (Chapter II.)

If the details of Spanish explorations have been covered fully in the grades, the facts may be summarized here. Use maps to locate the journeys. Pay more attention to motives and results.

Why Spanish conquest was easy in Mexico, but difficult farther north. Industries and government of the Spanish colonies. Relations with the Indians. Show the relations between these facts and present conditions in Spanish-American countries. The policy of Spain towards her colonies. How many American colonies does Spain now have?

The Rivalry of Nations in the Sixteenth Century. (Chapter III.)

A skeleton outline of English and French history between 1500 and 1600, in parallel columns, may be used for review of the European background. American events may be outlined in a third column, with names and events placed in their proper relative positions according to dates. Show why the English were not active in maritime enterprise and colonization at first; why a new era began later; how European events determined the periods of French activity; why the early attempts at English colonization failed.

Virginia and Maryland. (Chapter IV.)

Teach the fact that the London and Plymouth companies were a part of a great movement for commercial expansion. Show how colonization was related to this. Explain the money-making scheme of the London Company and how it underwent changes. The relation of the company to James I, and the beginning of representative government. The labor problem in Virginia. The conditions that determined the founding of Maryland.

New England. (Chapter V.)

Place in a column the list of monarchs and great events in English history between 1603 and 1660. Enter in a parallel column, at places corresponding to their dates, the events in American history prescribed in this chapter. Thus the very close dependence of the latter upon the course of English history may be made more clear. Discuss the likeness of Puritans and Separatists in England, and also the differences between them; show how conditions in America made them alike. Show how local and colonial governments in New England developed from necessity and from charter provisions. Emphasize the great ideas embodied in these events; religious freedom, local self-government, toleration.

Further English Colonization. (Chapter VI.)

Here, again, much of our colonial history is shown to be the outgrowth of European conditions. Use a map of the world. Why were the land system and the form of government in New Netherland unsatisfactory? Extend the outline of English history from 1660 to 1689, and fill in the events of American history. These outlines are not to be merely memorized, but are to be used as aids in the understanding of causal relations. Emphasize the conquest of New Netherland; motives for the founding of the Carolinas; the non-English immigrants; social and economic conditions in the Carolinas; Penn's motives and his plans for government.

The Colonies After the Restoration, 1660-1690. (Chapter VII.)

Treat the navigation laws from the standpoint of English industries and interests. Emphasize the revolt in Virginia against bad economic and political conditions (Bacon's rebellion, 1676). Show how and why the English government tried to control the colonies and why the control was imperfect. Refer constantly to the schedule of events in European history. Emphasize resistance to arbitrary government in New England and New York, also the section upon colonial life, especially the influence of physical geography upon industries. Use references here. What the colonists and the Indians learned from each other. Why disputes over land were common. The two great tendencies.

The French in America. (Chapter VIII.)

One or more pupils may make an intensive study of a French explorer: Champlain, Marquette and Joliet, or La Salle. Emphasize French methods of colonization. The names of the wars may be entered in a schedule one just before and one just after 1700; one preceding and one following 1750. Emphasize causes and results, rather than battles. Note that territory was ceded at the close of two wars only; map the changes. Topics worthy of expansion are: the expedition to Louisburg, Braddock's expedition, siege of Quebec. Topic 13, page 126, deserves full discussion.

For the topic Westerward Migration constant reference to the map is essential. The Albany Congress is important.

The English Colonies in the Eighteenth Century. (Chapter IX.)

Give much attention to the non-English colonists; also to industries, especially commerce. Changes in religion and education. The conflict between popular government and the policy of control, as represented by the assemblies and governors respectively. What did this conflict foreshadow?

Cause. of the American Revolution. (Chapter X.)

In discussing the mercantile system show how colonial industries were in some cases benefited, in others injured, and in still others let alone. The various acts of the English government were attempts to carry out a "New policy" of control, especially the enforcement of the navigation acts by various devices; also the establishment of a central military authority. A study of George III and his influence will help to explain the situation. In response to each obnoxious act of the English government are found two results in the colonies: (1) resistance, (2) a tendency toward union. Make a list of the steps leading to union. Show how the movement for independence was slow in arising, and was not unanimously supported. The Tories deserve attention. In the summary of causes (pp. 159-160) find specific illustrations under each head. Consult histories of England written by Englishmen to find their method of treating the causes of the Revolution.

The Revolutionary War. (Chapter XI.)

More profit may be derived from a thorough study of one or two campaigns, with references, than a slight treatment of all. Use maps constantly. Find reasons for the movements of armies, and the results of campaigns. Make the financial side of the war prominent. The Articles of Confederation were another step towards a strong union. The treaty with France, and that at the end of the war are important. The expedition of George Rogers Clark and accompanying events should be emphasized. Answer question 23, page 181.

The Period of the Confederation. (Chapter XII.)

The reading of certain clauses of the Articles of Confederation (see James and Sanford's Government in State and Nation, Appendix B) will make more concrete the discussion of its defects.

The western claims and cessions are important. What state or states claimed the ground where your schoolhouse stands? Study the plan of land survey in Indiana. Why was the Ordinance of 1787 important? Did it really exclude slavery from Indiana? Correlate with this chapter the history of early American settlement in Indiana.

Commercial treaties are important because they make definite and certain the conditions under which merchants and shippers can carry on their foreign business. Note the close commercial relations between England and the United States and the English policy of hampering our shipping. The trade on the Mississippi was very important to the Westerners. Make a list of the conditions that demanded the formation of a new government. How many of them are based upon industrial conditions?

The Formation of the Federal Constitution. (Chapter XIII.)

Try to form a vivid picture of the convention at Philadelphia and its leading members. See in the Virginia and New Jersey plans, new and old ideas respectively of a central government. The former triumphed in all essentials; under the first compromise the government was to be really rational. In connection with the third compromise, discuss reasons why merchants and shippers should desire control of commerce by Congress. Note how this subject and slave importation were balanced against each other, so that each might be carried. In this discussion turn constantly to Appendix II and read clauses of the Constitution. Ratification of the Constitution was as important as framing. Trace the exact process employed and list the arguments for and against it. The life of the people (pp. 207-215) is as important as their government; do not make this history too strongly political.

The Organization of the New Government. (Chapter XIV.)

In studying the departments of our government and the early laws, find the clauses of the Constitution that are their authorization. Also, refer to our present departments and laws. In order to understand the United States Bank, make a study of the functions of a bank today; i. e., deposit, exchange, loaning, and issue. Make a list of rights secured by the first ten amendments. Notice that all persons believe that Congress has implied powers; the controversy arises over the extent to which we should go in implying its authority. Note also that we can imply only upon the basis of powers stated in the Constitution.

relate the educational and literary movements with topics treated in other classes. Show the importance of the humanitarian movement.

Outline the events connected with nullification history (pages 306-308). Review the Virginia and Kentucky Resolutions (pages 235-236) and the Hartford Convention (page 268).

Review the United States Banks (pages 220, 272). Make a list of the reasons why Jackson opposed the bank; how many were good reasons? (Section 9, page 325.) Make a list of the events and conditions that combined to bring about the crisis of 1837; show relations among the various items. The independent treasury system (finally established in 1846, see page 328) has lasted until the present time (1914) and is being superseded by the new currency system enacted in December, 1913.

Review the various slavery topics previously studied. Why were abolitionists few in numbers? Explain the importance of the dispute over the "gag rule." Note that the Whig party (see pages 31, 318) was composed of both northerners and southerners, both loose and strict constructionists. This helps to explain Tyler's attitude and also some subsequent events, such as Clay's attitude in 1844, page 323.

Outline the history of Texas from 1819 to 1845.

Territorial Expansion and Growth of the Slavery Issue. (Chapter XXI.)

Make a map that will illustrate the various features of Oregon history (see page 326).

Trace Polk's policy leading to the Mexican War; was it justified? What was the opinion of leading statesmen? (Question 4, page 344.) Answer Question 5, page 344. Summarize the leading campaigns of the Mexican War. Compare these with the situation existing in 1914.

The Wilmot proviso is important as leading to the Free Soil party, and further slavery discussion. The election of 1848 illustrates again the peculiar composition of the Whig and Democratic parties.

The Clayton-Bulwer treaty is of interest in connection with Panama Canal history.

Have pupils see clearly the attitude taken by each of the leading statesmen upon the Compromise of 1850. Which were extreme and which were moderate in their views? Study carefully

the provisions of the fugitive slave and personal liberty laws. Did any routes of the underground railroad run near your home? Emphasize industrial conditions in the South. How was the North different?

Slavery Extension and Sectional Feeling. (Chapter XXII.)

Connect the Kansas-Nebraska question with westward migration; cotton and slavery demanded more territory because the wasteful system of cultivation wore out the land. Douglas thought he had a solution for the question of slavery in territories and new states; why was it not a good solution from the standpoint of many northerners? From that of most southerners? Begin an outline of events in Kansas (pages 348-350) that will be completed later (pages 360-361).

The Gadsden purchase gives occasion for a review of territorial acquisition (see map, page 349). The origin of the Republican party is important.

Do not neglect the industrial and social topics (pages 353-359), as these reflect the every-day life of the people more than do slavery controversies. The Dred Scott decision gives opportunity to review the three prominent views concerning slavery in the territories. Show the importance of the Lincoln-Douglas debates. Most important is the split of the Democratic party over the question of slavery in the territories. Explain the election, map, page 364, and the statistics on page 366.

Secession and Civil War. (Chapter XXIII.)

Discuss fully the reasons why South Carolina and other states seceded. With some classes, time may be profitably spent upon a study of the documents mentioned on page 370, rather than upon the campaigns of the Civil War. Make a chronological list of events between November, 1860, and July, 1861. The comparison between North and South is important; emphasize the importance of physical geography.

If intensive study of a campaign is feasible, select either Grant's campaign in the West (1862) or McClellan's. The finances of the war are very important. Note that the Emancipation Proclamation did not at once (January 1, 1863) free any slaves, but that it had other important effects. Select either Vicksburg or Gettysburg for intensive study.

relate the educational and literary movements with topics treated in other classes. Show the importance of the humanitarian movement.

Outline the events connected with nullification history (pages 306-308). Review the Virginia and Kentucky Resolutions (pages 235-236) and the Hartford Convention (page 268).

Review the United States Banks (pages 220, 272). Make a list of the reasons why Jackson opposed the bank; how many were good reasons? (Section 9, page 325.) Make a list of the events and conditions that combined to bring about the crisis of 1837; show relations among the various items. The independent treasury system (finally established in 1846, see page 328) has lasted until the present time (1914) and is being superseded by the new currency system enacted in December, 1913.

Review the various slavery topics previously studied. Why were abolitionists few in numbers? Explain the importance of the dispute over the "gag rule." Note that the Whig party (see pages 31, 318) was composed of both northerners and southerners, both loose and strict constructionists. This helps to explain Tyler's attitude and also some subsequent events, such as Clay's attitude in 1844, page 323.

Outline the history of Texas from 1819 to 1845.

Territorial Expansion and Growth of the Slavery Issue. (Chapter XXI.)

Make a map that will illustrate the various features of Oregon history (see page 326).

Trace Polk's policy leading to the Mexican War; was it justified? What was the opinion of leading statesmen? (Question 4, page 344.) Answer Question 5, page 344. Summarize the leading campaigns of the Mexican War. Compare these with the situation existing in 1914.

The Wilmot proviso is important as leading to the Free Soil party, and further slavery discussion. The election of 1848 illustrates again the peculiar composition of the Whig and Democratic parties.

The Clayton-Bulwer treaty is of interest in connection with Panama Canal history.

Have pupils see clearly the attitude taken by each of the leading statesmen upon the Compromise of 1850. Which were extreme and which were moderate in their views? Study carefully

the provisions of the fugitive slave and personal liberty laws. Did any routes of the underground railroad run near your home? Emphasize industrial conditions in the South. How was the North different?

Slavery Extension and Sectional Feeling. (Chapter XXII.)

Connect the Kansas-Nebraska question with westward migration; cotton and slavery demanded more territory because the wasteful system of cultivation wore out the land. Douglas thought he had a solution for the question of slavery in territories and new states; why was it not a good solution from the standpoint of many northerners? From that of most southerners? Begin an outline of events in Kansas (pages 348-350) that will be completed later (pages 360-361).

The Gadsden purchase gives occasion for a review of territorial acquisition (see map, page 349). The origin of the Republican party is important.

Do not neglect the industrial and social topics (pages 353-359), as these reflect the every-day life of the people more than do slavery controversies. The Dred Scott decision gives opportunity to review the three prominent views concerning slavery in the territories. Show the importance of the Lincoln-Douglas debates. Most important is the split of the Democratic party over the question of slavery in the territories. Explain the election, map, page 364, and the statistics on page 366.

Secession and Civil War. (Chapter XXIII.)

Discuss fully the reasons why South Carolina and other states seceded. With some classes, time may be profitably spent upon a study of the documents mentioned on page 370, rather than upon the campaigns of the Civil War. Make a chronological list of events between November, 1860, and July, 1861. The comparison between North and South is important; emphasize the importance of physical geography.

If intensive study of a campaign is feasible, select either Grant's campaign in the West (1862) or McClellan's. The finances of the war are very important. Note that the Emancipation Proclamation did not at once (January 1, 1863) free any slaves, but that it had other important effects. Select either Vicksburg or Gettysburg for intensive study.

The Civil War (Continued), 1863-1865. (Chapter XXIV.)

Four political topics of great importance: methods of raising troops, National Banking system, European recognition, election of 1864.

Make a list of the various attempts that were made by the Northern army to advance to Richmond (1861-1864). Place with each item the names of important battles and commanding generals. Study carefully pages 411-413.

Reconstruction, 1863-1872. (Chapter XXV.)

Do not allow prejudice against the South to control students' minds; rather let the atmosphere of the class be favorable to sympathetic appreciation of both sides of the problems that gave rise to the Civil War and the reconstruction problems. Note that Johnson's plan of reconstruction followed that of Lincoln quite exactly. Debate the question of negro suffrage. Was the House of Representatives right on the impeachment question? Make a list of the steps taken by President Johnson and the southern states and people in a column; in a parallel column place a list of the acts of Congress; thus show how each side to the controversy tried to check the other at various points.

Diplomacy, Finance and Politics, 1865-1877. (Chapter XXVI.)

The Mexican incident is of especial interest in connection with the recent trouble in Mexico. The treaty of Washington should be emphasized as leading to a very important case of arbitration. In the period since the Civil War industrial history is especially important; here are seen the beginnings of many movements that account for present industrial conditions. Constantly connect past and present in these topics. Under United States notes, review page 338. Review previous commercial crises (1819, 1837, 1857); were there any causes in common? How can these crises be avoided? Show how the disputed election of 1876 was the outcome of the reconstruction policy.

Industrial and Social Changes, 1866-1876. (Chapter XXVII.)

Have the Bessemer and open-hearth methods and the making of coke looked up. Discuss corporations, how and why formed, illustrations, benefits, evils. Have pupils mention instances of concentration in industry. Make an illustration of stock-watering,

with figures. Get information concerning a labor union from one of its members or an officer.

The silver question has ceased to be a problem in this country. As it is quite difficult, it may be omitted, so that more time can be given to other topics that involve important problems as yet unsettled. At the bottom, the demand for free silver, like the greenback movement, represented a demand for more money, and hence high prices, at a time when prices were declining.

Political Changes and Industrial Expansion, 1880-1890. (Chapter XXVIII.)

The history of civil service reform deserves attention; review pages 242, 305-306. The greatest evil of the spoils system lies not in the inefficiency of the officers, but in the low type of politicians and the bad political practices that frequently accompany it.

The distinction between interstate and intrastate commerce is important. Review the war tariff; see arguments for protection arising. Our relations with South and Central American countries are important in connection with recent events.

Discuss again the concentration of industry, with illustrations of trusts and methods used to suppress competition. Examples of anti-trust suits.

Industrial and Political Problems, 1890-1897. (Chapter XXIX.)

As with previous controverted questions, bring out both sides of the situation that gave rise to the Populist party. Mention ways in which national and state laws of recent years tend to carry out the ideas of the Populists. Note that the policy of Congress on the silver question, before 1893, was one of compromise; both Republicans and Democrats were divided within their own ranks over this question. Compare this situation with the way in which the Whig and Democratic parties treated the slavery issue. International arbitration is a topic of growing importance. Show how the various inventions have affected the lives of the students. Note that the Democratic party was divided within its own ranks on the question of protection; this accounts for the tariff law of 1894.

The Spanish-American War, 1898. (Chapter XXX.)

Summarize the causes of the war with Spain. Explain the statement of Wilson, Division and Reunion, that the sensational

character of events before the war began stand in contrast to the generosity that characterized its close.

Debate the question of Philippine annexation; the question of Philippine independence.

The Opening of a New Era. (Chapter XXXI.)

At the beginning of this chapter are found facts concerning the new economic condition that banished the free silver question. The relations of this country to foreign nations are important. In connection with the "new Monroe Doctrine" comment upon recent events in our Mexican relations. The history of the Panama Canal (see also pages 335-336) deserves extended treatment. In what ways has its construction set an example of good government? Mention recent labor disturbances in comparison with those mentioned here. Make a list of reforms that have come about, and others that are being advocated. What more recent legislation has superseded the emergency currency law?

Third Year.

CIVICS.

(Text: Government in the United States—Garner.)

The work in Civics should be of such character as to stimulate an interest in the development of our system of government and a desire to contribute to its efficiency.

This can best be accomplished by a study of the various forms of local government as suggested in the text adopted.

It should be the constant endeavor of the teacher to present the facts in the development of our body of laws and regulations as the outgrowth of certain political and civic needs as developed in the history of our nation and state.

The real aim in Civics is to give such a basis for our civil government that the pupils may become contributing members of society in the locality, where they are to live.

The suggestive questions for research should receive emphasis and application should be made to such forms of government as most commonly prevail in the vicinity of the school.

Visits should be made to such branches of the government as are nearest, and questions of local interest should be discussed by the pupils with parents, friends, and local authorities.

The various officers of the school and civil corporations are usually willing to visit the civic classes and discuss the duties and responsibilities of their offices.

Representative citizens of various occupations can be relied upon to discuss such legal and civil aspects of their occupations as are of interest to the community.

The elections should be observed and studied as a means of an intelligent understanding of the exercise of franchise and the duties of citizens in respect to the election of various officials. In such study and work extreme care must be exercised that no partisan element enters into the study or discussion.

The Legislature should be carefully observed and, if possible, visited during its sessions, and acts of general importance followed in the various steps by which they become laws.

The various agencies of township, town, city and state should be studied in relation to the local government and welfare.

The departments of the State Government which have charge of the protection of life and property should be studied and application made for material and bulletins giving reports of their work.

Special topics for investigation can be carried on by individual pupils and reports made to the class.

Discussion and debate of important questions is suggested as a means of increasing the interest and encouraging more careful study.

If vitalized and localized this study becomes one of the greatest interest and should be made one of the most important items in the course of study.

The supplement in the text on Civics, treating of Government in Indiana should be studied in connection with the entire work in Civics, and reviewed again at the close of the year.

Where applicable, reference has been made to this chapter in the general outline in Civics. The research questions at the close of each chapter are suggestive and practical and should be taken up in connection with each chapter, especially those questions pertaining to the State of Indiana and present day affairs.

These questions are especially valuable because they call for original opinions and can form a basis for discussion in the class, from opposing views that may be advanced by the pupils.

The present officials who are at the head of affairs in the state and nation should be named, and those who are of local interest. (See research questions.)

December 11, 1916 is the one hundredth anniversary of the Statehood of Indiana, and some special topics on the development of government in Indiana have been added at the close of the outline in Civics, for each term.

First Term.

Chapters I-X.

(Two Recitations per week.)

Local Government: Towns, Townships, and Counties. (Chapter I.) (Study, in this connection, Chapter II, pages 9-24, Government in Indiana—see supplement in text.)

County Government. The County-Township System. Merits of Local Self-Government.

Local Government Continued: Cities and Villages. (Chapter II.) (Study, in this connection, Chapter III, pages 25-39. Government in Indiana—see supplement in text.

Need of Municipal Government.

City Growth, (Causes and Results) Movement to check immigration to cities. Position of the city in the state.

The City Charter. The City Council and Powers. The Executive and Administrative bodies of the city. City Finances: Sources, Expenditures, Debts. Agents for protection of Life and Property. Municipal Public Utilities—Ownership, Municipal Courts.

The State Governments. (Chapter III.) (Study in this connection the Constitution of Indiana, page 74, Preamble, Articles I, II, and III.

Place of the states in our Federal System. Powers, Rights and Privileges; Obligations and Duties of the State.

The State Constitution—How Framed and Ratified and Amended. (Study in this connection Chapter IV of Government in Indiana, pages 41-45. See in this text, supplement on Government in Indiana. Study Article IV of Constitution of Indiana).

The State Legislature (Chapter IV).

Powers and Structure and Organization of State Legislatures. Compensation of members. How bills are passed. Initiative and Referendum.

The State Executive. (Chapter V.) Study in this connection Chapter IV, pages 45-66 in Government in Indiana. (See in text. Study Articles V and VI, Constitution of Indiana.)

The Governor and Lieutenant Governor, Election, Qualifications, Salaries. Other executive officers. Powers of the Governor; Legislative, Executive, Military, and Pardoning. State Civil Service system. Present executives.

The State Judiciary. (Chapter VI.) (Study in this connection Chapter IV, pages 66-71 in Government in Indiana, also Article VII, Constitution of Indiana.) Courts of Indiana. Functions and grades of Courts. Judges. Distinguish between Civil and Criminal laws and describe method of procedure in trial of each.

Suffrage and Elections. (Chapter VII.) (Study again in this connection Article II of the Constitution of Indiana.)

Qualifications for voting. Woman's Suffrage. Duty to vote. Registration requirement. Time and Manner of holding elections. History of the Ballot. The Australian Ballot. Give all the details of the casting of a ballot in Indiana. Is the method the same in all states? How are frauds prevented in elections? (Apply to Indiana.)

Political Parties and Nominating Methods. (Chapter VIII).

Nature and Functions of Political Parties. Existing Political Parties in the United States. In Indiana. Discuss Party Organization Primaries and Laws Controlling them. Nominations: By Conventions; by the people; by petition.

The Establishment of the Union. (Chapter IX.)

The Articles of Confederation. Defects as shown by the operation of the government under them.

Constitutional Convention of 1787 and its work. Ratification of the Constitution. Wherein was the system of government thus enacted, an improvement over that maintained under the Articles of Confederation.

The Two Houses of Congress. (Chapter X.)

The House of Representatives: Members—number, election, apportionment, qualifications, term, compensation.

Senate: Members—Number, elections, apportionment, qualifications, term, compensation. What change has there been recently in the method of choosing United States Senators? Discuss the steps that led to this change. What are the rights and privileges of the members of Congress? What are the special functions of the Senate?

Civic and Political Development of Indiana's Statehood.

Brief survey of the stages: (a) Colony of Virginia, (b) Territory of the Nation, (c) Statehood Features and defects of the first and second constitutions, (d) Is a new constitution now needed?

Second Term.

(Chapters XI-XX.)

Two Recitations per week.

Organization and Procedure of Congress (Chapter XI).

Officers, Opening of a New Congress, Oath of office, Adoption of Rules, Quorum, Seating of members. Committees, (how chosen). Describe all steps that accompany the introduction and passage of a bill in the House. In the Senate. What are the powers of the Speaker of the House? Compare with the same official in England.

Federal Finance, Taxation, and Money. (Chapter XII.)

Distinguish between direct and indirect Federal taxes and tell what constitutes each. Customs, duties, tariff. The Maximum and Minimum Principle—Explain. What are Internal Revenue Taxes? How collected? Name and describe all other sources of Federal Revenue. How is this Revenue deposited and expended? Describe the Monetary system, and National Bank system.

The Regulation of Commerce. (Chapter XIII).

How is foreign commerce regulated?

How is interstate Commerce regulated?

How is interstate railway traffic regulated?

Discuss Federal Anti-trust Legislation. Pure food regulation.

Other Important Powers of Congress. (Chapter XIV).

Make a careful study of the postoffice and all topics pertaining to this. What are copyrights and patents and how procured?

Discuss the military power of Congress. Discuss the Army and Navy. The present strength of each. The expenditures for their maintenance. Rank and Salaries of Officers.

What of the powers of Congress touching upon Bankruptcy legislation?

The Presidency: Organization and mode of election. (Chapter XV.)

Study this chapter with reference to the research questions on pages 296-297.

The Presidency (Continued) Inauguration, Powers and Duties (Chapter XVI). Study this chapter with reference to the research questions, on pages 322-323.

The Cabinet and the Executive Departments (Chapter XVII). Origin and Nature of the Cabinet.

Give the history and functions of each Department of the Cabinet. Present members.

The Federal Judiciary (Chapter XVIII).

What is the judicial power of the United States? What are the regular federal courts? Functions.

What officials are in these courts? How appointed?

What special powers have these courts?

What constitutional protection is afforded in the Federal Courts?

What amendments to the Constitution have affected the courts in their duties and privileges and the business in such courts?

Government of the Territories and Dependencies. (Chapter XIX.)

What power has congress over the territories? Discuss the origin of the Territorial System. The Northwest Territory. Relation of Indiana to this Territory. Name and describe the government of the fully organized territories of the United States; of the partly organized territories; of the unorganized territories and dependencies.

Citizenship (Chapter XXI).

Study this chapter with reference to the research questions, pages 391-392.

Indiana: Study of the main functions and problems of the (a) County and Township government, (b) City Government, (c) State Government. Detailed study of local government in the community..

References: Readings in Indiana History; Bulletin (Indiana University) Davison, "Government in Indiana" (see adopted text on American History) Hodgin; "Indiana and the Nation." Hendricks, "History and Civil Government of Indiana," Gitteau; "Government of Indiana."

FOREIGN LANGUAGES.

If only two years of foreign language are taken both years' work shall be done in one language.

Two (2) units required. (See page 10).

LATIN.

The first end aimed at in the study of Latin should be ability to read the language intelligently and at a fair pace. With this attained other great advantages, certain to be derived from the study, will take care of themselves. The pupil should be made to feel from the start that with a reasonable expenditure of time, energy, and with fair ability (good teaching being pre-supposed) he can learn to read Latin of average difficulty as he learns to read languages other than his own. To secure proper results the study should be continuously pursued through four years, of which a full year should be devoted to the study of the Elements, a full year each to Cæsar, to Cicero and to Vergil. In the case of a three years' course, Vergil should be omitted.

First Year.

(Text: Latin for Beginners—D'Ooge.)

The following introduction to the study of Latin is from the "Teachers Manual to Accompany Latin for Beginners," which contains, in addition to the introduction, outlines for each lesson. The author states that these suggestions are designed primarily for inexperienced teachers of first-year Latin and that even for them they are to be taken as suggestive merely. Ultimately every strong teacher must develop his own method, and the stronger he is the less he will feel bound to follow the methods recommended by others.

As a rule pupils beginning Latin are not well prepared in English grammar. To meet this defect it has been customary to devote some pages to a review of English grammar before the Latin grammar is begun. It has seemed a wiser plan to combine the review of the former with progress in the latter. Accordingly, in this beginners' book explanations of grammatical terms and concepts are introduced at the points where the study of the Latin makes a knowledge of them necessary. Similarly the Latin syntax

is compared with the corresponding English syntax. Pupils may, therefore, begin the Latin lessons at once with no preceding review of English grammar.

The first assignment of work will naturally be the Introduction. Call the pupils' attention to the Review Questions on p. 4, and use them in the recitation. Besides locating Latium and Rome on the map, pronounce the names and have the pupils locate the other districts of Italy and the surrounding seas. Also the Alps, Illyricum, Sicily, and Africa should be pointed out.

For the second class period, read over with the pupils the first seven sections and pronounce the Latin examples for them to imitate. Go over the examples again and again, for an incorrect pronunciation acquired at the outset is apt to persist. Assign the pronunciation of the examples and §§8-10 for the third class period.

Begin the third class period with the pronunciation of the examples in §§5-7. Then have the exercise in §10 written on the board and the words divided into syllables and pronounced, being careful about the placing of the accent. You will notice that the rule given for the division of combinations of two or more consonants differs from the one formerly observed and still given in many books. The old rule has been shown to be incorrect. For the fourth class period assign the following lesson: Memorizing of the Latin in the exercise and in §10 and the study of §§11-16.

For the fourth class period have ready on the board a list of at least twenty words with the long vowels marked, including, for the most part, words used before. First have the pupils recite individually and then in concert the Latin exercise in §10. Then, using the list, let the pupils divide the words into syllables, give the length of each syllable, and pronounce the words. Pupils always confound length of vowel and length of syllable (cf. §13.2, note). Dwell on this point until the distinction is clear to all.

Spend the fifth class period in reviewing the whole subject of pronunciation and on the reading of the poem (§18). One or more stanzas may be assigned for memorizing. The recitation in concert of stanzas learned is sure to be stimulating.

As outlined above, the average class will be ready to begin Part II after five recitations. This does not mean that the subject of Pronunciation is finished. Much patient effort for many weeks to come will be necessary before pupils will pronounce even tolerably well.

Probably the lack of time will prevent securing during the first year more than the correct pronunciation of the individual words in a sentence.

CONDUCT OF THE LESSON.

The Recitation Period. Always devote the first five minutes of the recitation period to the explanation and development of the work for the next day. Make the assignment definite and do not give more than the class can learn and than you are sure you can cover in the time allotted. Explain all rules. Pronounce paradigms and vocabularies and have the class repeat them. Do not allow pupils to accent the final syllables when repeating paradigms.

After the lesson for the next day has been assigned, review rapidly the work of the preceding day. Insist on quick and accurate replies to your questions. Blundering and hesitation are to be expected in the advance; but the pupil should be made to understand that they are not excusable in the review.

Allowing that one-third of the recitation period has been spent as outlined above, the remaining two-thirds can be devoted to the lesson of the day. Emphasize its proper subject strongly in the recitation of each pupil. Each pupil should be called on at least once, and work at the board, as well as the daily recitation should be the daily rule.

Memorizing. Insist on the thorough memorizing of paradigms, vocabularies, and rules. Without it progress is impossible. Forms must be known so well that they are recognized at once and without deliberation. Pupils should be able to give *instantly* the English for the Latin and the Latin for the English of the words in a vocabulary, and to recite rules accurately and without hesitation.

Learning the Forms. To learn the forms thoroughly incessant drill is necessary, both orally and by the use of the blackboard. The inflectional system must be mastered the first year, and requires far more practice than any text-book can provide.

When a noun is to be declined either orally or at the board, train pupils always to give the meaning, the gender, and the base before giving the declension

When declining an adjective follow the same method as with nouns.

When a verb is to be conjugated either in full or in part, always have its meaning, its principal parts, and its stems given first. It

is far better for pupils to learn the verb by stems than by moods. Knowing the stems, tense signs, mood signs, and personal endings, and what stem to use for whatever form, the pupil is soon able to recognize any form at sight and to give instantly any form of any verb of which he knows the principal parts. He should be made to understand that until he can do this he does not know the verbs.

It is a good plan to write near the top of the blackboard before the recitation a number of nouns, adjectives, and verbs, one for each member of the class, choosing such words as occur in the lesson of the day. Send the pupils to the board and let each write the meaning of the word falling to him, give its inflection, and construct a sentence which shall contain the word in question. This exercise may be varied by the teacher writing beforehand English instead of Latin words. The pupils will then, first of all, have to write the equivalent Latin.

The rapid recitation of paradigms by successive pupils is helpful; for example, one giving the nominative, another the genitive, and so on. Daily practice with the blank declension and conjugation schemes to be explained later (see pp. 12, 27) is strongly recommended. It all comes to this—that drill on forms cannot be overdone. Especially after the class has been over all the regular declensions and conjugations this drill should be constant and merciless. And the work is not done until every pupil knows every form.

Vocabulary. The learning of words is of no less importance than the learning of forms and cannot be emphasized too much. The special vocabularies should in each case be thoroughly mastered before beginning to read the accompanying exercises. Train pupils from the very outset to give nouns with the genitive and the gender, adjectives with their different gender terminations, and verbs with their principal parts. For example, in reply to the question "What is the word for *master?*" the pupil should answer, "*dominus, dominī,* masculine"; to the question "What is the word for *good?*" the pupil should answer, "*bonus, -a, -um*"; and to the question "What is the word for *advise?*" the reply should be "*moneō, monēre, monuī, monitus.*"

However well the vocabularies are learned, earnest efforts on the part of both pupil and teacher will be found necessary to retain them. Much reading of reviews and at sight will be of assistance. Attention should also be called to the kindred English words that are given in the vocabularies, and the pupil should

be encouraegd to think of others. In the text-book provision is made for thorough reviews of words at short intervals. The test on these should be rigid. Teachers will be able to devise various methods of drilling on words. The following, which may be called the vocabulary roll call, has been found especially useful: When the class enters the room let it remain standing, each pupil at his place. Pronounce words to the different pupils, English words to be translated into Latin or vice versa, and let those who answer correctly take their seats, the others remain standing until they have done the same. Much enthusiasm can be aroused by letting two pupils choose sides for a vocabulary contest, as in a spelling match.

The text-book is so planned that all the words to be memorized are reviewed three times. This fact, as well as that no new vocabularies are assigned after Lesson LX, should give ample time and opportunity for drill and study.

Translation. Suggestions for translating from Latin into English are given in the text-book, p. 194. Call the pupils' attention to these early in the year and emphasize the importance of forming correct habits from the beginning. It is advisable at intervals to call for a written translation of passages of connected Latin. *In these translations demand good idiomatic English.* When you have corrected the papers, have two or three of the best ones read as models for the rest. This practice will do much to correct the translation jargon that the pupils are prone to employ.

Pupils always find it much harder to translate from English into Latin than from Latin into English. For the first few weeks help should be given them for this work. For the first few weeks go over the English-Latin exercise with the class when you assign it, and explain all the difficult points. Do not fail to insist upon a correct order of words. It is a good plan to train pupils to arrange the English sentence mentally in the proper Latin order before turning it into Latin.

If more practice seems to be needed in turning English into Latin than the book provides, invent some sentences yourself, or have the pupils, with closed books, translate into Latin at your dictation the English of the preceding Latin Exercise.

Do not have the translation of the English sentences written in blank books, which are likely to be handed down from class to class.

Sight Reading. A distinguishing feature of the text-book is the large amount of simple Latin it contains in the form of dialogues and stories. This material will be found well adapted for sight translation, since the selections contain, as a rule, but few words not previously learned. Nothing develops reading power more quickly than work of this kind and it should be practiced as frequently as possible.

General Vocabulary and Index. Pupils need some instruction in the use of the general Latin-English vocabulary and the index. This instruction should be given as early as §136, where the general vocabulary must be used for the first time.

Reviews and Formulas.—The lesson of the preceding day should always be reviewed before the work of the day is taken up. In addition the reviews provided for by the text-book at frequent intervals should be made thorough. You will find it profitable to make each the subject of a written test. The last three lessons in the book provide for a review of all the constructions that have been discussed. An unusually careful study of these lessons is advisable just before taking up Caesar. It would be a good plan, therefore, to go over them a second time at the beginning of the second year.

To insure completeness and uniformity in the answers to certain constantly recurring questions, the following formulas are suggested. 1. For describing nouns; *dominam,* accusative singular from *domina, dominae,* feminine. Follow this with the rule for the case. 2. For describing adjectives: *bonārum,* genitive plural feminine from the adjective *bonus, -a, -um* to agree with the noun ——. Follow with the rule for the agreement of adjectives. 3. For describing relative pronouns: *quōs,* accusative plural masculine from the relative *quī, quae, quod.* It is masculine plural to agree with its antecedent——(give the rule for the agreement of the relative); it is in the accusative case because (give the reason), according to the rule (give the rule for the case of the relative). 4. For describing verbs: *ament,* active subjunctive present from *amo, amare, amavi, amatus,* third person plural number to agree with its subject———. It is in the subjunctive mood because (give the reason for the mood and rule).

It leads to better results for the teacher to designate in advance in the reading lessons such words as are to be inflected and parsed.

First Term.

Lessons I-XLVI, pages 1-117.

The first six lessons are used to review and re-establish certain fundamental grammatical principles and to develop the meaning and value of the case forms. American boys and girls have no conception of an inflected language, and it is of no profit to them to recite paradigms, be it ever so glibly, unless they have some comprehension of what inflection means. The different cases have therefore, been introduced one at a time, and their fundamental values established as a prime essential to all progress. It is not until Lesson VII, after all the cases have been gone over individually, that the first declension is given in full. These first lessons will be found very simple, but they have a peculiar value in laying the foundation for all that is to follow.

The following suggestions for lessons I-IV will serve as a basis for later lessons.

The object of Lesson I is to establish the simplest grammatical concepts. When assigning it, pronounce and have repeated by the class all the Latin sentences. Ask the pupils to prepare and be ready to give English sentences illustrating the subject, object, predicate, and verb or copula.

Place special emphasis upon §22*a*.

When assigning Lesson II, pronounce and have the class repeat not merely the Latin words in §§26, 30, but also the Latin sentences, §§ 31.II.

There are three rules to be learned, §§ 25, 28, 29. Always make a point of having all rules memorized verbatim.

In Lesson III pronounce and have the class repeat the Latin sentences in §§ 32.1, 34.

Point out that the gist of § 32 is contained in the last sentence in § 32*a*.

In teaching § 33 have ready on the board the left half of the table which shows the English cases. Then construct the other half of the table in the recitation period at the dictation of the pupils.

When assigning Lesson IV, turn to p. 283 and pronounce and have the class repeat the first vocabulary, and emphasize the importance of learning this thoroughly before beginning work on the exercises, § 39. There should be no need of turning back to the vocabulary if it is properly learned.

Pronounce and have the class repeat the Latin sentences in §§ 39, 40.

In answering such questions as occur in the Conversations, as in § 40, train the class to answer by a complete sentence and not merely by a single word. For example, the answer to the first question is not merely *dea,* but *Diāna est dea.*

In the English-Latin exercise, § 39.II, insist upon proper order of words.

Second Term.

Lessons XLVII—Complete text.

Study the directions given at the beginning of the outline in Latin, and the suggestions for the first term.

Second Year.

Caesar.

(Text: Caesar's Gallic War—Walker.)

Study the definitions given at the beginning of the unit lesson in Latin, and the suggestions for the first term.

The standard college-entrance requirement for the second year of Latin is books I to IV of Cæsar's Gallic War, or an equivalent, with one exercise a week in Latin composition. This amount can be covered properly by well prepared classes in a nine-months' school year, but is too great for many schools. Teachers who find the amount excessive should cover thoroughly as much as possible and should have the rest read at sight in the classroom without previous preparation.

Teachers may be advised to postpone or to omit the latter half of Book I, because of the great proportion of indirect discourse contained in it. The state text is planned to facilitate such postponement. See Preface, p. 3. If the four-book edition is used, Book I may be completed after Book IV. If the seven-book edition is used, any of the annotated portions of the last three books will be found more interesting. If any portion is to be read wholly at sight, chapters 24 to 58 of Book V will be found most suitable for the purpose.

A properly prepared class should read chapters 1 to 29 of Book I in ten or eleven weeks. After that the rate of progress should be progressively more rapid as Cæsar's vacabulary and syntax become more familiar. A teacher who expects to read the full

four books must plan to complete Book I in the first half year; or, preferably, the first half of Book I and the whole of Book II. Books II, III, and IV, or III, IV, and the latter half of I can then be read in the second half year.

The four most important aspects of the second year's work are translation, syntax, vocabulary, and a study of the narrative as a whole. Of these the most important is training in vigorous, idiomatic translation into genuine English, since the best justification of Latin in the schools is its influence on English. The Latin teacher inevitably teaches English of some sort; *it is his duty to teach good English.* It is no waste of time to insist on a discriminating choice of words, the proper construction of every sentence, and even the most effective style. An occasional written translation, carefully corrected for its English, is helpful. If the English teachers will sometimes accept such a translation in place of an original theme, and will correct it in accordance with their usual standards, the co-operation will be most helpful.

A thorough drill in syntax is essential, because both correct translation and all hope for the pupil's progress depend on an accurate knowledge of the uses of words in sentences. The state text affords a special opportunity for syntactical drill in connection with the first half of Book I, by giving grammar references three times for each important construction. See Preface, p. 2. At the end of each chapter is given a list of the constructions for which the third references have appeared, so that teachers may know easily and definitely what syntactical points the class should have mastered. Aside from this, most of the syntactical drill should be given in connection with the work in composition.

Ease and pleasure in translation depend largely on one's knowledge of vocabulary. Much time cannot be spared for drill on vocabulary, yet some time should be given to it. In the page vocabularies, which give each Latin word at the time of its first occurrence in the text, the state text gives some indications of the value of the word for Cæsar. The number 1, 2, 3, or 4 indicates that the word appears that number of times in Books I to IV; an asterisk means that the word occurs five times or more. If a word occurs only once, it would be a waste of time to drill on it. On the other hand, it is an advantage to master as thoroughly as possible all words marked with an asterisk, since they will occur at least four times or more, and will have to be looked up each time in the back of the book unless mastered at once. Some drill on such words may be recommended.

Cæsar's narrative is full of interest to those who follow it intelligently, but no narrative has ever been written which would be interesting if read at the rate of a few lines a day and with no attention to the narrative as a whole. Any effort to make Cæsar's story known and understood will be repaid by the interest of the class. Moreover, the effort is worth making for its general educational value, since one of the chief functions of language study is training in getting the full meaning out of a printed work. The state text attempts to ensure an understanding of the story by its maps and notes; but the teacher's cooperation is needed. The campaign maps at the beginning of each book should be helpful for this purpose. Some teachers have found it helpful to have their classes prepare similar maps for themselves. Outline maps of Gaul may be obtained at slight expense from The McKinley Publishing Company, Philadelphia, Pa.

N. B.—*Do not let the edition with notes be used in class.*

The publishers furnish a separate copy of the text with every copy sold. Insist that the pupils use it in class. If they have trouble in getting it, write to the publishers. The notes and vocabulary are printed on the same page with the text for convenience in studying, not for class use.

First Term.

Book I Chapters 1-29. Book II.

Second Term.

Complete Book I. Books III and IV.

Third Year.

Cicero.

(Text: Cicero's Orations and Letters—Johnston-Kingery.)

The third year of Latin study is devoted usually to Cicero—selected orations alone, or these together with some of his letters. The student who has mastered his beginner's book and read Cæsar should be able now to pay more attention to the elements of style. Of course accuracy in grasping the thought and rendering it into correct English must be required at all stages of the study of any language; but this should at length become largely a matter of habit, leaving the student free to feel and reflect some of the niceties of expression. He should begin to weigh and discriminate between English synonyms and select the best word or

phrase for the translation of each particular passage. He must not, for example, slavishly render *res* "thing" or "affair," but must note its reference in the context and translate accordingly (see note on I. 3. 11). The verb *dare* certainly means "give" and *facere* "do," but in various connections many fine shadings of these fundamental ideas are to be felt and brought out in translation.

Intense in his feelings and often unrestrained in his expression of them Cicero employed many rhetorical devices, appreciation of which is essential to a full understanding of his writings. His grouping of words in pairs or longer series, his use of asyndeton, of oxymoron, of exclamations involving nouns, infinitive phrases or *ut*-clauses, his accurate and consistent use of the subjunctive, his delicate shading of ideas in conditional sentences, are but a few of the features of a style which has come to be accepted as the best type of Latinity.

It is common to read first the four orations *in Catilinam,* and this is well. Yet in many cases a class may profitably omit one, say the second, and take instead an equivalent amount from other orations or from the letters. Some teachers prefer to present the speeches in their chronological order, bringing in the "Manilian Law" *(de Imperio Pompeii)* before the Catilines. In favor of this is the further fact that this oration is outlined very fully and clearly by its author and consequently is easier to read understandingly. If this course be followed the order for classes using the smaller edition of the Cicero will be M.L., I. II, III, IV, Archias, with such use of the letters and the Sallust as the teacher may determine.

The ten-oration edition offers a much wider range of reading. To the six orations and twelve letters of the smaller book are added the opening argument against Verres—Cicero's first great legal success—and a vivid passage from the latter (unspoken) arraignment; two of the "Cæsarian" orations; the fourth Philippic; and nine more letters illustrating phases of the orator's later life. This enables the teacher to vary the programme from year to year, substituting the Verres or some of the later speeches for one or another of those more commonly studied. Between the Verres, at the beginning of Cicero's career, and the Philippic, delivered less than a year before his death, was an interval of more than twenty-seven years, and the careful student will be interested in seeing what difference he can detect between the orator's style at thirty-six and at sixty-three.

With either edition the letters may be used for regularly assigned study, for mere illustration or for sight reading. They reveal the human side of their author as his public speeches cannot do, and their style is more colloquial.

Sallust's history of the Catilinarian conspiracy, which is given practically entire, may be read as a whole or merely used for reference. If time permits no more, the teacher may well read to the class—while its members follow with the text before them—the portions bearing on the contents of each oration as studied, noting points of agreement or differences between the two authors. The speeches of Cæsar and Cato in chapters 51, 52, may be compared with Cicero's fourth *in Catilinam,* which was made in the course of the same debate. In the same connection may be read letter 17, showing how the orator felt long afterward regarding his own and Cato's part in the affair.

Formal study of the grammar in connection with Cicero will, aside from needed review, deal especially with the matter of complex sentences and the use of moods, and this will naturally be emphasized also in the work in composition. The review questions at the end of the notes of each chapter in orations I and II are intended to aid in keeping fresh in mind constructions already learned. The list can be extended by the teacher at will.

The Introduction may be assigned for study as a whole in lessons of convenient length, or the parts bearing on each oration may be taken in connection with it—§§ 1-43 of the Life of Cicero in preparation for the reading of Oration I; §§44-50 for III; §§51-59 for IV, etc. The second part of the Introduction, dealing with "The Roman Commonwealth," may be studied in formal lessons, or read in class with necessary elaboration and explanation and then used for reference. Special topics, with references also to larger works, may be assigned to students for reports—say on the powers and duties of the different officials, the functions of the senate, the *cursus honorum,* Roman courts and juries, etc., *ad lib.*

The school library will of course contain many of the books named on pp. 73, 74, with others, and the use of these should be encouraged in every way for the sake of added information and interest and the formation of the habit of collateral reading. When to this is added the judicious use of maps, pictures and other illustrative material the student should be able to form some conception of the life of Cicero's day, and, seeing their setting, appreciate more fully his speeches and letters.

A difficulty often experienced is that of getting the class to comprehend an oration as a logical whole. Reading a small portion each day and centering his attention on the difficulties of language and style the student is too apt to forget the larger purpose of the whole argument. It is a good practice, therefore, for the teacher —or even better for some member of the class—to take a recitation period on the completion of an oration and read it through at one sitting, while the others follow his translation with the text before them. Any one of the Catiline orations can easily be translated thus in less than forty minutes.

First Term.

M.L. and Orations Against Cataline I-II.

Second Term.

Orations Against Cataline III-IV. Archias.

Fourth Year.

Vergil.

(Text: Vergil's Aeneid—Knapp.)

The primary purpose of a course in Vergil, it is needless to say, is to read and to understand Vergil himself. To that end all else should be subordinated. Yet, in the accomplishment of this primary purpose should be achieved, naturally, most, if not all, of the results named below as a desirable outcome of the study of Vergil.

With respect to the reading of Vergil by a given class little real help can be given to the teacher of that class by any one else. No one else will know so well as the individual teacher the preparation or the lack of preparation of the class under his direction. No one else will know so well the amount of time available for the course. Some general hints may, however, be of service. (1) The teacher should make sure that the lack of preparation is not chargeable to himself. Knowledge and personality are the things that count most in teaching. With the aids supplied in Kapp's Vergil, either directly or through the bibliographical material given there (see especially §§315-318, the Introduction), the teacher can, if so minded, make adequate preparation for his important task. (2) If the time is lacking for the proper reading of Aeneid I-VI complete, Books III and V may be read more rapidly or may be omitted entirely. (3) The total

number of verses to be covered in the entire year should be divided by the total number of periods available. This will give the average number of verses to be covered per period. At first the number of verses assigned per lesson should be much below the average. (4) Reading at sight may be practiced from day to day, in part in connection with advanced lessons for the next period, in part also in connection with the selections given from Books VII-XII.

From the study of Vergil certain results should be gained, in the order here named: (1) An appreciation of the difference between the language of Latin prose and the language of Latin poetry; (2) an appreciation of poetical form (meter and versification) as a vital element in poetry; (3) some idea of Greco-Roman mythology and religion; (4) some conception of the impression made on the Romans by the history of Rome; (5) Vergil's purpose in writing the Aeneid and the way in which that purpose was accomplished; (6) Vergil's merits; (7) Vergil's relation to his contemporaries, in literature and in public life both, and to his literary predecessors; (8) Vergil's influence on later ages.

Toward the realization of these purposes help will be found in Knapp's Vergil.

To obtain the first result cited in the preceding paragraphs the Introduction, §§86-225, will be of great service. The teacher should pick out the paragraphs that seem to him of most importance, and should drill the pupils on these, as the matters involved in them are met in the actual reading of Vergil. Some paragraphs (e. g. 87-110) may be long postponed; indeed, the pupil may be left to use them as he needs them, from time to time, for the explanation of forms that give him trouble. Other paragraphs should be mastered early. Tastes will differ here, as elsewhere, but §§113-117, 122, 124-125, 127, 128, 136-139, 140-144, 160-170, 191-203 are surely important. With the aid of the Introduction and even more of the Index the teacher can always provide himself with an adequate array of illustrations of points under discussion. One important matter may here be noted: in illustrating usages the teacher should employ only passages already studied by the pupil. In seeking to understand a passage in Book I, for example, the pupil will derive no benefit from a passage in a later book which he has not yet read.

For the second result cited above, §§226-238 of the Introduction are of first importance; (§§239-260 may be postponed for a time;

some of them may be omitted). Before allowing the pupil to try to read Vergil metrically the teacher should drill the pupils on certain fundamental rules of quantity, which, if mastered, will enable the pupil to determine at once the quantity of most Latin syllables. These are (a) the quantity of syllables made up of diphthongs or containing diphthongs; (b) the quantity of a vowel before another vowel or *h*; (c) the quantity of final syllables, first those ending in a vowel, then those ending in a consonant, especially *s*; (d) the quantity of vowels in the "increment," first of nouns, then of verbs; (e) the quantity of the first syllable of a disyllabic perfect or supine; (f) the quantity of the first two syllables of reduplicated perfects; (g) the quantity of the vowel before *nf* or *ns*. Then, after the teacher has carefully read in class some verses, the pupil should write out, from day to day, for a time the 'scansion' of some verses, and, finally, should try reading verses aloud. See, in this connection, H. W. Johnston, *The Teaching of Vergil in the High School* (Scott, Foresman and Co., Chicago, 1901); Knapp, *The Scansion of Vergil and the Schools,* in *The Classical Weekly* 3 (1909), 2-5, 10-12; Miss K. E. Carver, *Teaching Latin as Literature,* in *The Classical Weekly* 7 (1914), 186-187.

Knapp's Introduction, §§267-305, will assist in reaching the third result. Of very great value here is such a book as Gayley, *The Classic Myths in English Literature and in Art* (Revised edition, 1911, Ginn and Co., Boston).

In relation to results (4) and (5) see Knapp, Introduction §§48-77. Of service also will be Knapp, *Some Points in The Literary Study of Vergil,* in *The School Review* 13 (1905), 492-508, and Knapp, *The Originality of Latin Literature,* in *The Classical Journal,* 3 (1909), 251-260, 299-307.

See, also, Rand, *Virgil and the Drama,* in *The Classical Journal* 4 (1908), 22-33, 51-61, and Yeames, *On Teaching of Vergil,* in *The School Review* 20 (1912), 1-26.

Sellar's valuable book, *Vergil* (Oxford University Press, 2d edition, 1883), Glover's *Studies in Vergil* (2d edition, New York, 1912), and the chapters on Vergil in Mackail's *Latin Literature* and in Duff's *A Literary History of Rome* should be at the teacher's elbow at all times.

Knapp's Vergil, §78, and the books referred to above, under (4) and (5), relate to result (6).

Knapp's Introduction §§69-75 and the books referred to in (4) and (5) relate to result (7).

For references touching upon result (8) see Knapp's Vergil, §§79-85, and the books referred to under (4) and (5). Add to these Comparetti, *Vergil in the Middle Ages* (New York, 1895), Tunison, *Master Virgil* (Cincinnati, 1890); Leland, *The Unpublished Legends of Vergil* (New York, 1900).

First Term.

Vergil's Aeneid: Books I and II.
(For Book III, see suggestions in Introduction.)

Second Term.

Vergil's Aeneid: Books IV and VI.
(For Book V, see suggestions in Introduction.)

GERMAN.

(Texts: Essentials in German—Vos
or
Beginner's German—Walter and Krause.)

Either of the adopted texts may be used, according to the choice of the school and the method employed.

Little encouragement should be given the student to take up the work in German unless he expects to continue it for at least two years. A single year of German has no very great value.

In three or four years the student should master the principles of grammar and acquire so much of a vocabulary as will enable him to read not too difficult German with some ease and fluency and to understand when spoken to, as well as express himself in a simple way in the foreign idiom. Some of the time often spent in translation might well be given to conversational exercises and the construction of simple sentences.

Constant drill in reading at sight and from dictation should be given so that the student may be impressed that it is not so much any one book that he is studying as a language. The pronunciation should be carefully watched, especially during the first year, to guard against a careless and slovenly pronunciation.

Too much stress can hardly be laid on the continued review of grammatical principles.

The following suggestions on the study of German are taken from the recommendations of the National Education Association Committee on the Reorganization of Secondary Education. Bulletin 1913. No. 41, U. S. Bureau of Education.

An abundance of dictionaries should be at all times of easy access. Thieme-Preusser, Flügel, Flügel-Schmidt-Tanger, and Cassel are excellent.

Magazines, preferably illustrated, and newspapers should be placed in the hands of the students, and a Conversation Club will also be of great service to keep the pupils alert and interested.

The aims in the study of German, are:

(1) To secure a reasonable degree of phonetic accuracy and lead the pupil to feel its importance.

For the child, speech has been a more or less unconscious process. With the study of a foreign language he should discover the necessity of making sounds and their formation, the object of careful attention. He should gain thereby a conscious control of his speech organs; should develop his power to use them as he wills; should learn to feel the significance of sound distinctions, and to enunciate clearly whenever he speaks. The slovenly mumbling that so often passes for English speech sufficiently emphasizes the need of this.

(2) To teach precision in the use of words and to give a clear understanding of grammatical relations and of the common terms which state them, showing why such terms are necessary.

The child's own language has been so much a part of his very being that it is extremely difficullt for him to look upon it as a proper object of study. The normal child feels competent, without any rules, to speak in a perfectly satisfactory way. And if well born and reared he ought to be. To learn to employ the terms of grammar seems to him a most unnecessary and foolish thing. After reading or hearing that John struck James, he gains no further information by being told that John is the subject of the sentence, and he can not conceive of any human being so stupid that he must be told that John is the subject before knowing which boy struck the other. When he knows offhand how words go together, why should he learn strange, odd-sounding terms to explain relations which to him need no explanation? That is the puzzling mystery which very often befogs the boy who "can't understand grammar." He is confused by the attempt to explain to him by mysterious vocables what seems perfectly clear, without any explanation. In the case of a foreign language the child comes easily to see the need and the use of grammar, if from the beginning it is made what it should be, the handmaid of the text.

Vagueness of the thought associated with a word is even more

common than faulty enunciation. The study of the foreign language shows the importance of knowing the exact meaning of words and of using them with care.

(3) To stimulate the pupil's interest in the foreign nation, leading him to perceive that the strange sounds are but new ways of communicating thoughts quite like his own; showing him by the close resemblances in words and viewpoints that the German and the Frenchman are his kinsmen, with interests, ambitions, and hopes like his own; revealing to him that their tales can give him pleasure, their wisdom can enlighten him.

In seeking to attain the special ends for which any subject is peculiarly well adapted, the real teacher will ever bear in mind those general aims that are indispensable in all teaching that is worthy to be called education. Habits of industry, concentration, accurate observation, intelligent discrimination, systematic arrangement and presentation, careful memorizing, independent thinking so far outweigh the advantages gained merely by knowing something about a particular topic that they are perhaps too generally assumed to be universal, and, like the air we breathe or the water we drink, are sometimes forgotten or neglected. The personality of the teacher and the manner in which he works, rather than the subject he teaches or the method he uses, will make for those elements which, after all, are the great objects of secondary education, the business of which is indeed to impart knowledge that is likely to be useful, but far more to develop in the child those tastes, powers, and habits that fit for happy efficient living.

Among processes that are employed in the teaching of German we may mention grammatical study, reading aloud, writing from dictation, conversation, translation from and into foreign language (version and theme) reproduction orally or in writing, paraphrasing, composition based on the text, and free composition. It is not intended to say what processes should be used or how they should be combined by any teacher, but the following suggestions are offered for making as effective as possible whatever work the teacher may decide to undertake.

For all pupils in a secondary school Grammar must be the handmaid of the text and must be regarded as existing solely in order to make clearer the language which it serves. The need of a rule and its application should be apparent to the pupil before he is required to learn the rule; words should be seen in use with a context before they are classified and memorized; the force of an inflection

should be made plain from its use in a word group before the pupil is asked to inflect the paradigm; and in the unceasing repetition necessary to fix inflectional forms, care should be taken that they are never parrot like repetitions, devoid of thought. Make the text the center of all inflection; base it upon grammar, conversation, and composition; and the grammatical knowledge derived from the text as a model will be applied intelligently in written and oral expressions.

Reading aloud—now too much neglected in the mother tongue—should be a favorite exercise. With large classes no drill is so effective in teaching pronunciation as reading in unison after the teacher. In later work intelligent reading aloud is helpful in fixing the foreign language in the memory; it may take the place of translation where the simpler character of the text and the manner of reading give sufficient evidence that the meaning is clear; and the practice is enjoyable and useful to those who form the habit of reading aloud in their own study.

Writing from dictation has always been much employed in French schools for French children learning their own language, and it is much to be commended. While less difficult than reproduction or paraphrasing, it is an admirable test of the care with which a passage has been studied, and the dictation of unseen passages is an excellent criterion of the pupil's ability to understand the spoken language. Dictation may begin early in the course, and until the very end it will be found useful both as a test and as training.

Conversation has been alternately praised and condemned. Some regard it as enlivening, stimulating, and instructive—the most enjoyable and profitable of all exercises. To others it is futile, inane, productive of no valuable results, and terribly wasteful of time. It seems clear that not all teachers and not all classes can use conversation to good advantage in high-school work. The teacher must be inspiring and perfectly at home in the language; the class must be alert, responsive and homogenous; the work must be systematically planned and followed out swiftly and directly to a definite end. Otherwise the time can be spent better in other ways. With large classes the necessary conditions rarely obtain, and unfortunately most high-school classes are too large for the best work. Although conversation as a formal class exercise is apt to be a failure, there is no class in which a competent teacher will not find many opportunities to converse easily in the foreign lan-

guage, now giving a simple explanation, now asking a question and getting an easy answer, all so naturally that no one seems aware that the foreign language is used. The more of this the better. Conversation of this kind is the straight road to effective possession of a language; neither strained nor forced, it is good work.

Translation, too, has its warm friends and its bitter enemies. Reformers have worked as hard to drive it out of the class as they have done to drag conversation in; but theme and version are still neither dead nor moribund, and there is no prospect that an exercise which has maintained itself since the beginning of language study is going to vanish in the next generation or two. The difficulty is that the meat in the sandwich has a tendency to drop out and leave only the bare bread—voces et inter eas nihil—in other words, that translation comes to be a mechanical substitution of the words of one language for the words of another, with little or no thought in the process, while translation ought to mean the study of a passage until its thought is clearly apprehended, and then an effort to put that exact thought into the other language with all the force and beauty that our command of the second language makes possible. This, of course, is translation of the ideal sort, but it is the kind of translation at which all translation should aim, and the only kind which will contribute effectively to a command of the foreign language and an appreciation of its qualities. With the other more common kind of translation the pupil never reads French or German, but only the shabby English into which he has more or less correctly paraphrased the original; he never writes real French or German, but only English with a foreign vocabulary. Such translation is rightly condemned as vicious and demoralizing, a veritable hindrance to the learner; but only the most vigorous and persistent efforts will keep the beginner from translating in just that way. Among helpful devices for preventing it we suggest oral translation of sentences heard but not seen, the translation, with book closed, of a sentence that the pupil has just read, or other ways for avoiding the *mot à mot* and securing a grasp of the word group as a whole with a complete meaning.

"What do you mean?" "So and so." "Then say that!" will sometimes get a real translation instead of the monstrosity that has been first offered by the pupil.

Underlying all the discussion for and against translation is the inevitable fact that not one student in a thousand can expect to gain such control of a second language that he can frame his

thought in it as quickly and effectively as in his own; hence, whenever a thing is to him real and important, he will think it through first in the vernacular, after which any expression of the thought in a second language can not fail to be more or less consciously and directly a translation. The foreign correspondent must translate when he communicates the information received from abroad; he must translate when he writes in a foreign language the instructions received in English from his employer; the engineer, the lawyer, the physician, the scientist, the philosopher, the author must all translate when they proceed to use in their business the information gleaned from foreign sources. Even the teacher must translate when he tells his associates what our colleagues in France or Germany say of the direct methods. The practical thing then, is to train the pupil to translate as he ought, and to depend for his expression in the new language, not on dictionary substitutes, but on the treasure of foreign words and expressions which he has acquired and learned to associate with their correct meaning. And the time to teach him this, which is no easy thing to learn, is while he is learning the language, for practice in doing it must be long and careful if it is to be successful.

To read and understand a foreign language is much easier than to speak or write in it. Until, however, one can give in his own language a swift and accurate rendering of what he has read, there is good reason to doubt whether he has been satisfied with the vague sort of semicomprehension which, if unchallenged, sometimes passes for understanding when our pupils read the mother tongue. Inability to translate rapidly and well must imply either inability to understand clearly what has been read or else a poor command of English. If the latter, the American boy or girl needs nothing so much as just the kind of training in English which this translation affords: if the former, we need to try the pupil by the test which most swiftly and certainly reveals the weakness. Hence translation of the right sort, both from and into foreign language, must not be omitted from the high school courses.

On the other hand the student must be taught to get thought directly from the original, and instruction in the foreign language is not intended primarily as instruction in English. So the wise teacher will give but a portion of his time to translation, and he will avoid too great use of spoken English by having a considerable part of the translation which he deems necessary written rather than oral.

The only safe use of a foreign language is that which imitates the expressions of scholarly natives. Hence all work of the learner must be based on good models and the stages of imitation seem to be: Exact reproduction: paraphrasing, with variations of person, number, tense, etc., and substitution of other suitable words for those of the text: free reproduction or composition based on the text and closely following it: and free composition.

First Year.

There exists a very wide difference of opinion as to the choice of material to be used with beginners. Aside from classes that for the first year study the grammar only—may their number ever grow less—the texts used may be roughly classified as—

(1) Conversation manuals, based on daily life, foreign travel, etc.

(2) Selections from historical or scientific readings, regarded as having intrinsic value.

(3) Fiction, fairy tales, etc., regarded as having little intrinsic value, but suited to interest and attract the pupil.

(4) Texts of literary reputation, as Télémaque.

However varying tastes and circumstances may influence the decision among these groups, it is reasonable to assume that the nation whose history, literature, or commercial importance makes its language worth studying should have elements of interest for every intelligent person, and that arousing this interest must play an important part both in opening a field of wholesome enjoyment and in stimulating a desire to continue the subject gladly and diligently.

Having agreed, see Introduction, that our first aims should be phonetic training, grammatical comprehension, and interest in the foreign nation, and that our next should treat largely of the life of the people and be of the simplest type, we come next to the question of details in the treatment of this material. Experience indicates that in this respect no universal agreement can be secured, but certain general principles of procedure may be suggested and certain dangers of common practice may be pointed out.

First, the time devoted at the beginning to learning accurately the sounds of the new language is usually quite insufficient. It would be advantageous if an arrangement could be made by which for several weeks no home study would be assigned in a foreign language, allowing teachers of other subjects to utilize that time in exchange for classroom time. In this way all work done in the new

language might be done in class and under the direction of the teacher. If home lessons must be assigned during those first few weeks, they should be such as to involve the least possible danger of fixing wrong speech habits. The use of phonetic script probably makes it possible to assign home work with less danger of associating wrong sounds with the normal spelling. If it is not thought wise to use the phonetic script, keep the vocabulary small, repeat the same words again and again with all the variety of simple real uses that the ingenuity of the teacher can discover; let home work include nothing that has not been exhaustively worked over in class. Much copying of text and writing out at home the most useful inflections of a very large number of words will fill up the time out of class that some teachers feel obliged to demand lest pupils get at first the unfortunate impression that the new study is a "cinch."

Using a vocabulary should mean more than merely finding an English substitute for a foreign word. The second and more important part is visualizing or otherwise securing a clear and definite concept of what is meant, then associating permanently this concept, and not the English word with the foreign word. If this association of concept and foreign word can be secured as swiftly and certainly without the intervention of English, the English, of course, is superfluous; but, if English is the quickest and most convenient means of securing this association, there seems to be no valid reason for depriving ourselves of its aid. Only with or without English, we must not fail to attain as our result a direct and accurate association of though and the foreign word.

The first year should be given to the systematic study of the subject-matter in the adopted text-book.

The reading should be started as early as possible in some such book as "German Stories Retold," Kern, and continued in "Immensee" such books as Guerber's "Märchen und Erzählungen."

First Term.

Vos: Lessons I-XVII.

or

Walter and Krause: Lessons I-XXIV.

Second Term.

Vos: Complete.

or

Walter and Krause: Complete.

Second Year.

First Term.

Continue the study of simple stories in Readers. Practice in conversation and composition.

Study: "Immensee"—Storm: "Höher als die Kirche," Hillern.

Second Term.

Stories in Readers. Practice in Conversation and Composition.

Study: "Wilkommen in Deutschland," Mosher. "Das Edle Blut," Wildenbruch.

Third Year.

First Term.

Stories in Reader. Practice in Conversation and Composition.

Study: "Flachsmann als Erziecher," Ernst: "Die Journalisten," Freytag.

Second Term.

Stories in Reader. Practice in Conversation and Composition.

Study: "Die Jungfrau von Orleans" or "Marie Stuart," Schiller.

Fourth Year.

First Term.

Stories in Readers. Practice in Conversation and Composition.

Study: "Hermann und Dorothea," Goethe.

Second Term.

Stories in Readers. Practice in Conversation and Composition.

Study: "Minna von Barnhelm," Lessing.

MATHEMATICS.

In case but two years' work is done in mathematics, one year shall be in Algebra and one year in Plane Geometry.

The Course—

First Year—Algebra.
Second Year—Algebra, half year; geometry, half year.
Third Year—Geometry completed, plane and solid.
Fourth Year—Commercial Arithmetic, half year.

Some teachers prefer the following arrangements:

First Year—Algebra.
Second Year—Geometry, plane.
Third Year—Algebra, half year; solid Geometry, half year.
Fourth Year—Commercial Arithmetic, half year.

ALGEBRA

(Text: Wells and Hart.)

The Wells and Hart New High School Algebra embodies the suggestions on the Course in Algebra which have appeared in the Uniform Course of Study in recent years. The consequence is that a satisfactory course in algebra will result from simply teaching the topics as they are given in the text and in the order in which they are given in the text.

Point of View of the Text.—Teachers will get the point of view of the authors by reading the Preface of the text on pages iii and iv. Attention may be directed particularly to the last paragraph on page iii and the first three paragraphs on page iv.

Use of the Teaching Done in the Text.—In many cases it may be wise to simply read over the illustrative example or the "development" given in the text. Good results will follow if the textbook instruction or some similar instruction is taken up in class in a careful manner before any examples of the kind in question are assigned for study outside of class. One good plan is to start the teaching of a new idea at the very beginning of the period so that

there will be a sufficient amount of time in which to do it thoroughly.

The developments in the text will prove useful also in assisting backward students in catching up with the class—such students being required to write out the answers to the questions proposed, as in the development on page 127.

The Rules; Their Use.—The rules are printed in a manner which renders their use easy. Students should be encouraged from the start to turn to the appropriate rule when in difficulty; to read the first step and do as directed; then to read the second step; etc.

Whether or not students should be required to memorize the rules is a matter for the individual teacher to decide. It is more important that a child should thoroughly understand the rule, know where it is to be found, and know how to use it, than merely to be able to repeat it. Many teachers prefer to emphasize the use of the rules and consequently have little interest in efforts to get students to memorize them.

Abstract Examples.—The text contains a large number of examples to meet the various classroom needs of teachers. Enough examples have been given so that teachers will be able to have an abundance of drill work without dictating any examples; so that those who wish to send the whole class to the board but do not wish to have neighboring students doing the same example will find enough in the text; so that the teacher may assign optional examples to the bright student who does not have enough to do to keep him busy and additional examples to the weak student who needs additional instruction. The result is that for the small class and in schools having only an eight months' school year it may be unwise to attempt to solve, in the classroom, all of the examples; certainly would it be unwise to attempt to have every pupil solve every example.

Toward the end of each list there are some examples which are a little more difficult than the rest; at the beginning of many of the lists are examples which may and should be solved mentally.

Examples like those on page 119, numbers 40-58, may be regarded as supplementary examples.

Problems.—For the same reasons given in the preceding section a large number of problems also is given and, as in the case of examples, it may be unwise to attempt to have every problem solved in class. In some schools where conditions render it necessary to economize in time, the following types may be regarded

as supplementary and may be omitted without interfering with the rest of the course: Examples 3-8 of Exercise 10; paragraphs 44, 84, 143, 144, 172, 173, 174, and pages 289-296.

One of the best plans for teaching problems is to take them up first in class, having the students work out the equations but not solve the equations. Then, for the next study assignment, have the pupils study the same problems, requesting them to form the equations and solve them completely. Each type is preceded by a translation exercise which should never be omitted; thus, Exercise 38 should be done to prepare for Exercise 39.

Form and Methods of Solving Examples.—The illustrative solutions given in the text may well be regarded as models for the solutions of corresponding examples by the pupils. Particular attention is directed to the symbols introduced in paragraph 42. Teachers will find that with a little insistence upon the use of these symbols by the pupils, as illustrated in Example 11, page 49, they can succeed in getting students to use the symbols both intelligently and effectively. The solution of equations by means of the axioms with the aid of these symbols is continued until page 98 in order to avoid meaningless mechanical solutions by transposition and clearing of fractions.

Amount of Text to Cover.—It is desirable to decide at the beginning of the year upon the amount to be attempted during different parts of the year; to decide that by Christmas-time so many chapters will be covered; that so many pages will be covered by the close of the first semester, and so on. Just how much can be done in any particular school depends upon local conditions. It is of course more important that the instruction shall be thorough than that it shall be spread out over much ground. Nevertheless there is danger that without some such schedule too much time may be devoted to parts of the course.

Requirements in algebra for entrance to college are covered adequately in the first four hundred pages. Three semesters are usually allowed for completing this work. In Chapter XXVI some miscellaneous supplementary topics are given for those teachers who desire them.

First Year

It is recommended that such shorter term schools as cannot cover these outlines thoroughly, in the time allotted, omit supplemental exercises and some of the problems as suggested in the Introduction to this subject.

First Term

Chapters I-VIII, pages 1 to 154.

Second Term

Chapters IX-XV, pages 154 to 280.

Second Year

First Term

Chapters XVI-XXVI, pages 280 to 421.

Schools where conditions render a briefer course necessary may omit the material termed supplementary in this outline. In extreme cases the chapter on logarithms may be omitted, as many colleges do not demand it; also Chapter XXIV may be postponed until the course in geometry is taken. These omissions will not interfere with the balance of the course.

Second Term

GEOMETRY.

(Text: Wentworth-Smith.)

1. *Introduction.*—It is desirable to devote the first few days to leading the class to a knowledge of what geometry is, what its purposes are, what instruments are used, and how simple figures are drawn. The basis for this work is provided in pages 1-24. If the time permits, a few simple measurements of heights and distances may be taken out of doors so as to accustom the class to thinking of geometry figures in space. Any considerable amount of preparatory work of this kind is not necessary, however, with a class as advanced as the one beginning geometry.

2. *Formal Plane Geometry.*—The formal part of plane geometry covers pp. 25-272 of the text, but, as the authors state, not all of this work is intended for any one class. Teachers should feel free to select such exercises as they believe best suited to the needs of the students and to eliminate certain propositions and corollaries not needed for the proof of subsequent propositions. It must be remembered that the purposes of the proved propositions are three-fold: (1) To set forth the great basal facts which are used in proving other important propositions; (2) To present to the student other facts which are very helpful in the exercises, but are not indispensable; (3) To keep before the student models of

good form which he can follow in his original work. While it is desirable, therefore, to take all the standard propositions of which the proofs are given, a certain number may be omitted without breaking the sequence, and should be omitted with certain classes and individuals. The teacher's good judgment will determine the students from whom such proofs should not be required.

3. *The Incommensurable Case.*—Now that geometry is taught to a relatively larger class of pupils than formerly it is well to recognize that certain difficulties of theory which were once required should be made optional. Chief of these is the incommensurable case. It is no longer required for entrance to college, and the teacher's attitude may properly be that this case shall not be taught to all students. The first time it is met the teacher should carefully develop it; the proof as given in the book should then be read aloud with the class, the teacher making certain that it is understood, and showing that a strict adherence to logic would require it as a part of the sequence of work; but thereafter only the commensurable case need be required, although the best students may be encouraged to take the incommensurable one also, and to recite upon it if they have mastered it. In this way both classes of students are given due consideration.

4. *Limits.*—What has been said of the incommensurable case applies also to the theory of limits. Much less is made of it than was formerly the case, and all that is to be expected is that a pupil shall have a fair idea of the meaning of the statements relating to a limit. The subject is not a part of a strict sequence in geometry; it is introduced only for a few cases in measurements; and the teacher is entirely safe in giving it an informal treatment, not holding students to formal recitations upon it.

5. *Sections of Plane Geometry Which May Be Omitted.*—While it is desirable that all the propositions and corollaries should be considered by a class, partly because of their bearing upon the exercises, nevertheless a teacher may omit any of the following without breaking the logical chain of geometry, and may assign some or all of these sections as exercises along with the other examples:

Optional Sections: 69, 77, 104-106, 108, 123, 124, 128, 129, 131-133, 136, 146, 171, 173, 175, 179-181, 187, 191, 195, 197, 216, 218, 230, 234, 236-238, 241, 242, 244, 247, 279-281, 290, 300, 303-306, 308, 323, 324, 328-330, 335, 336, 343, 345-347, 349, 356, 364, and also 367-404, if, as is sometimes the case, the mensura-

tion of the circle is not taken. The Appendix may also be omitted. Teachers should not feel, however, that all of these sections are to be omitted. The list is a maximum one, and enables the teacher to check these sections in the book as possibilities in the way of omission with pupils who are not up to the average. It would be unfortunate, for example, if sections 367-404 were omitted.

6. *Sections of Solid Geometry Which May Be Omitted.*—In the same way a teacher may omit the incommensurable cases in Solid Geometry, may treat sections 622-634 informally, and may omit, if necessary, sections 565, 568, 602, 610, 616, 682, 690-692, 707, 708, and the Appendix.

7. *Selection of Exercises.*—The Wentworth-Smith Geometry has an unusually large number of well-graded exercises. They are so arranged as to encourage even the weakest student to work independently from the very beginning. The exercises are, therefore, the most important feature in any course in geometry. It is very desirable that they should be varied from year to year, so that a body of solutions may not be passed down from class to class. On this account the authors have provided more than any one class will use, and the teacher is urged to adopt some system of selection which will vary the assignment from year to year.

8. *Arrangement of Work.*—After reading the above general suggestions, teachers will recognize that the variation in localities, in classes, and in individuals makes it impossible to arrange for exactly the same amount of work each half year. In general the following plan is a safe one:

Outline.

Book I, Book II (19 theorems), pages 1-125.

This is an average assignment, for a class must go slowly at the beginning. If the teacher is judicious in the selection of exercises and in the informal treatment of limits, this ground can be covered in a satisfactory manner by any class.

Third Year

First Term (Geometry.)

Book II Complete. Books III, IV, V, pages 126-260.

Pages 126-260, completing Plane Geometry. As already stated, the teacher must select with care in order to cover this work in the time assigned; but, with the suggestions

above given, this selection is easily made. Teachers should look upon the book as their slave, not as their master, and above all they should not feel that every exercise should be taken, or that even half of them are for any one class. The stronger and more ambitious students should be encouraged to take more than the others, feeling a reward in the pleasure they get from achievement and in a judicious amount of commendation from the teacher, but especially in the power that comes to them for their later work.

Second Term

Solid Geometry. Books VI, VII, VIII.

With the omissions suggested, it is not difficult to cover this work in the time assigned. Here, as in Plane Geometry, the course is sufficiently flexible for all types of pupils. Suggestions have been made for contraction through the omission of certain propositions, while the Appendix permits the course to be expanded if desired. The teacher may assign many or few exercises, as circumstances require, but a sufficient number should always be given to cultivate the independence of the student, placing him upon his own resources and giving him that confidence which it is one of the purposes of geometry to foster.

COMMERCIAL ARITHMETIC.

This subject should be taught with daily recitations for a half year or with recitations every other day for a full year. If daily recitations are short and little home work is required, the book can be planned to cover daily recitations. The following outlines, based upon the book in use, provide for one semester and two semester courses.

The teacher should bear in mind the practical nature of this subject, and should constantly impress upon pupils the fact that the problems assigned are such as are likely to come within their own experience in business and in the affairs of life. When the pupil is brought to see the reality of a problem he is impressed with its value to himself and his interest is vastly stimulated.

Good form should be insisted upon. Illegible work is very discouraging to the worker, sometimes making him lose his mental grasp of a problem entirely. It is safe to say that 50% of the errors in calculation made by pupils are the result of careless work. It is practically impossible to add correctly a column of figures

not neatly arranged in columns, especially when the figures are written badly.

The pupil should be able to give the reason for every process. Never allow pupils to experiment until the right answer is secured. It is recommended that at the time of assigning each lesson the teacher give a few minutes of drill upon the thought of the problems assigned.

Business arithmetic should, under wise instruction, prove to be a mine of practical information to the pupil. The teacher should never lose an opportunity to call attention to points of informational value and to teach the customs of business as they relate to the class of vocational work treated in the problems.

The fundamental processes (addition, subtraction, multiplication, and division) should be made automatically rapid and accurate at the start. This will have a very beneficial effect on the later work, as the attention of the pupil will be released for the consideration of the thought elements of the problems, without the distraction caused by constant attention to the mechanical side of the work. This principle should be applied to every subject. For instance, in studying interest, the pupil, after reasoning out the formula used, should learn to apply it with facility, so that in solving problems involving interest on notes his principal attention can be devoted to the thought.

Outline for a Year's Course.

Fundamental processes, pages 6 to 39.....3 weeks
Emphasize accuracy and speed in the four processes, drilling to secure automatic facility.

Fractions, U. S. Money and Aliquot Parts, pages 40 to 75..4 weeks
Drill thoroughly on fractions. Emphasize aliquot parts as the basis of a short method of multiplication.

Denominate Numbers and Practical Measurements, pages 76 to 138 .....8 weeks
The practical character of this work should be emphasized in such a way as to arouse the enthusiasm of the pupils. Arithmetic is fascinating when its relation to life is made clear.

Percentage, pages 139 to 176.....4 weeks

Interest and Discount, pages 177 to 210.....4 weeks

Banking, Accounts and Bills, pages 211 to 250.....5 weeks

Partnership, Stocks and Bonds, Taxes, and Review, pages 251 to 278 ..... 5 weeks

No effort will be necessary on the part of the teacher to arouse interest in the practical business subjects in the latter part of the book. This is the time to lay stress upon quantity of work. Make an earnest effort to get a correct solution of every problem in the book from every student. The average number of problems for each day is about 15. Assign more than 15 problems when the character of the work will permit. In equations and partnershp settlements you should not assign more than two or three problems for a day's work.

Outline for Half Year Course.

Fundamentals and Fractions pages 6 to 75..... 1 month

It is assumed that pupils proposing to complete commercial arithmetic in four months are already well equipped in the mechanics of arithmetic. The teacher should bear this in mind in assigning lessons. The outline calls for nearly three pages per day. It is also assumed that these pupils will not need to work all the practice problems. The book contains ample problem material for a full year course. Teachers of the one semester course will not assign all problems.

Denominate Numbers and Practical Measurements, pages 76 to 138..... $1\frac{1}{2}$ months

Pupils planning to complete the commercial arithmetic in one semester are assumed to know most of the tables. Nearly two pages a day are assigned.

Percentage and Interest, pages 139 to 210..... $1\frac{1}{2}$ months

The plan should be to hold recitations upon the principles involved and the mental problems, assigning a large number of written problems to be worked outside of class. The teacher can cut materially the total number of written problems, but should use judgment.

Banking, page 21 to end of book.....1 month

Equations, in this section, is a very difficult subject. Some of the problems under this head may be omitted as soon as the pupils have demonstrated their understanding of the subject.

REFERENCES.

The following books and magazines contain helpful suggestions on the teaching of mathematics and should be read by all teachers of that subject:

1. The Teaching of Elementary Mathematics. D. E. Smith.
2. The Teaching of Mathematics. J. W. A. Young.
3. School Science and Mathematics.
4. The Teaching of Geometry. D. E. Smith.

SCIENCE.

One year's work should be done in one of the following sciences or any of the applied phases of these sciences, viz.:

Botany, Zoölogy, Physics, Chemistry or Physical Geography.

Botany.

One of the following four text books must be used in this subject:

Practical Botany—Bergen and Caldwell.
Text Book of Botany—Coulter.
Plant Life and Plant Uses—Coulter.
Practical Course in Botany—Andrews.

Botany, like any other science, should be presented in the high school course with reference to certain general and fundamental principles that can be worked out and comprehended by high school pupils in a high school laboratory; for no doubt much harm has been done in the past, both to the science and to the pupil by attempting to make the work correspond more nearly to the elementary course in the college or university. However, plants can and should be taught in the high school as living things, from the standpoint of the general principles of form, structure, and function, including adaptation to surroundings.

These topics are not to be presented as abstract or isolated subjects, such as morphology, anatomy and physiology, but from a concrete basis, and as applying to some definite plant or plant organ accessible to the pupil.

In the vast majority of commissioned high schools the work will necessarily be confined largely to the higher plants, although a few of the lower plants may be included in a year's course, as indicated in the outline following. The order in which the work of the several sections may be taken up is secondary. The equipment of the laboratory and the seasons of the year may determine very largely the sequence of topics:

EQUIPMENT.

The following articles should be found in every botanical laboratory:

Good microscopes.
Glass slides.
Cover glasses.
Razors.
Camel's hair brushes (small).
Watch glasses (flat on bottom).
Dissecting needles (self-made by forcing sewing needles into slender handles).
Fine pointed forceps.
Chemical reagents, such as iodine, glycerine, potassic-hydrate, potassic-iodine, and a few stains, such as fuchsin, cosin and safranin.

Zoology.

One of the following four text books books must be used in this subject:

General Zoology—Linville and Kelly.
Elements of Zoology—Davenport.
Descriptive and Practical Zoology—Colton.
Animal Studies—Jordan, Kellogg and Heath.

Fall and winter, a study of comparative anatomy of a series of animals, beginning with the lower types. In this the organism as a living thing may be considered, and then its parts, noting the division of the body into definite organs and systems for definite functions, and the gradual increase in complexity and efficiency of these organs and systems as the higher types are reached. The spring may be taken up with a more detailed study of some forms familiar to the teacher. In this connection frequent excursions must be taken and especial attention paid to the variety of species found, the characteristics differing most in the different species, the peculiar surroundings in which each lives, the peculiarities that fit each one to its peculiar home, the habits of each species, the coloration of each species as compared with its surroundings, the comparative number of individuals of each species, the difference between individuals of the same species.

Each laboratory should secure through the Congressman of the district the publications of the Agricultural Department on noxious and beneficial plants, birds, mammals and insects, and the reports of the Indiana State Entomologist.

REFERENCE LIBRARY.

1. Studies of Animal Life. Walter, Whitney & Lucas.
2. Invertebrate Morphology. McMurrich.
3. Comparative Anatomy of Vertebrates. Wiedersheim.
4. American Insects. Kellogg.
5. Manual of Vertebrates. Jordan.
6. Comparative Zoölogy. Kingsley.
7. Invertebrate and Vertebrate Zoölogy. Pratt.
8. Animal Activities. French.

The laboratory, for this subject, should be well lighted with table space of $2\frac{1}{2} \times 1\frac{1}{2}$ feet for each student, and should contain at least two compound microscopes, five dissecting microscopes, one scalpel, one pair of scissors, one pair of forceps, one blow pipe, hand lens and mounter needles.

Marine animals for class use may be obtained of the Marine Biological Laboratory, Woods Hole, Mass.

Alcohol may be purchased for schools at about 50 cents per gallon. Application should be made to some distillery to set aside ten gallons or more for withdrawal, duty free. A bond must be given for twice the amount of the tax of the alcohol to be so withdrawn. Printed instructions may be secured from the nearest collector of internal revenue.

Physics.

One of the following four texts must be used in this subject:

High School Course in Physics—Gorton.
Physics—Black and Davis.
Elements of Physics—Hoadley.
A First Course in Physics—Millikan and Gale.

It is recommended that this science be omitted from the high school curriculum rather than intrust its presentation to a teacher who has not had at least one year's work in Physics, in a college having a good physics laboratory. If physics cannot be taught well, substitute for it a science that can be. It makes not so much difference *what* is taught, as *how* it is taught.

The work in physics should consist of two parts: (a) Recitation work based on the text-book and illustrated by experiments—chiefly qualitative experiments performed by the teacher and, in some cases, repeated by the pupil; (b) laboratory work in which the pupils perform the experiments and the experiments are largely quantitative. Where time and room are

somewhat limited the two kinds of work may be done in conjunction. It is the sense of the State Board of Education that the course in physics should emphasize the explanation of natural phenomena in a manner which can be appreciated by high school pupils of average ability, and that the course should not over-emphasize the mathematical aspects of the subject. Do not discourage the class by much problem solving. *Do not attempt to teach the subject without illustrative apparatus.*

List "A" represents the minimum of equipment. Lists "B" and "C" should be added as soon as possible:

LIST A. (For an appropriation of $100.)

Two meter sticks.
Adhesion disk.
One dozen Prince Rupert drops.
Brass ball 1½ inch diameter.
Wood ball 1½ inch diameter.
Lead ball 1½ inch diameter.
3 English and metric balances.
One Harvard trip balance.
Support and pans for balance.
1 Boss of brass weights, 500 gr.
1 set of universal weights.
1 air pump and compressor.
1 receiver plate.
1 bell jar, open.
1 Boyle's law tube.
1 barometer tube, straight, sealed.
5 pounds of mercury.
5 pounds assorted glass tubing.
12 feet 3-16 inch rubber tubing.
Cork borers.
1 gross assorted corks.
Hydrometer for heavy liquids.
Hydrometer for light liquids.
2 hydrometer jars, 12 in. by 2 in.
Double scale thermometer, etched, 300 degrees.
Double scale thermometer, etched, 100 degrees.
Lodestone.
Pair of 8-inch bar magnets.
Horseshoe magnet, 6-inch.
1 pound iron filings.
Helix and ring.

Magnetic needle, agate cap.
Friction rod, wax.
Friction rod, glass.
2 friction rods, hard rubber.
Electroscope.
Pith balls and cord.
Wimhurst machine, 8-inch.
Electrophorus disk and plate.
Proof plane.
2 gravity cells.
Dry cell.
Primary and secondary coil.
Dissectible motor.
Decomposition of water apparatus.
Telephone receiver.
Telephone transmitter.
Lecture table, demonstration galvanometer.
Resistance box.
Electric bell.
Brass wire spiral spring.
Adjustable tuning fork.
Concave and convex mirrors.
2 prisms, equilateral, 4-inch.
1 mounted lens, 5-inch.
1 set of demonstration lenses.
Iceland spar.
2 retort stands, 3 rings each.
1 clamp.
2 Bunsen burners.
1 soldering outfit.
1 double scale graduate 500 cc.
1 pound double cotton covered office wire, No. 18.
Tin cups, glasses, chemicals and other supplies, to be purchased of local dealers as needed.

LIST B. (For an appropriation of $150.)
Items of List A.
Ball-bearing rotator.
Centrifugal ring to fit rotator.
Balls unequal weight, on frame.
Glass globe for rotator.
Crovas disk.
Siren disk.

Color disk.
Manometric flame apparatus.
Specific gravity bottle, adjusted.
Dipping needle.
Dissectible Leyden jar.
Fuller cell complete.
Mechanical power apparatus.
Seven in one apparatus.
Stop cock, both ends for tubing.
Air thermometer tube.
Sympathetic forks and hammer.

LIST C. (For an appropriation of $250.)
Items of Lists A and B.
Micrometer caliper, 1-5 cm.
Collision balls, on frame.
Second law of motion apparatus.
Inclined plane.
Harvard apparatus for latent and specific heats.
Pair of parabolic reflectors.
Palm glass.
Chladni plates, large size.
Sonometer, with weights.
C tuning fork, mounted, without hammer.
A tuning fork, mounted, without hammer.
Tourmaline tongs.
Porte lumiere.
Optical disk, including refraction tank.
Geissler tube.
Tangent galvanometer, complete.
Wheatstone bridge.
Wireless telegraph outfit, complete, including large size induction coil.
Balance of $250 to provide blinds for darkening the room, apparatus case, etc.

If room is not situated so that sunlight can be reffected into it, omit the porte lumiere and optical disk from the above list.

If building is not supplied with gas, omit Bunsen burner and buy a gasoline blast lamp.

If laboratory work is arranged for and the class is large, it will be necessary to duplicate such pieces as meter stick, balances, weights, cells, galvanometers, resistance boxes, etc.

REFERENCE BOOKS.

S. P. Thompson: "Elementary Lessons in Electricity and Magnetism."
Thompson: "Light, Visible and Invisible."
Lodge: "Pioneers of Science."
Ganot: "Physics."
Houston and Kennedy: "Electricity Made Easy."
Duncan: "The New Knowledge."
Hopkins: "Experimental Science."
Hanchett: "Alternating Currents."
Fournier: "The Electron Theory."
Field: "Story of the Atlantic Telegraph."
Ives: "Flame, Electricity and the Camera."
Witham: "Recent Developments of Physical Science."

Chemistry.

One of the following four texts must be used in this subject.

Inductive Chemistry—Bradbury.
First Principles of Chemistry—Brownlee.
An Elementary Study of Chemistry—McPherson and Henderson.
Chemistry—Hessler and Smith.

The study of chemistry, accompanied by individual experimental work by the pupil and demonstrations by the teacher, provides excellent training in observation and a useful knowledge of important natural and industrial processes, as well as in logical thinking. The aim of the course in the high school should be mainly to secure an understanding of fundamental principles and the development of the powers of observation, deduction and expression. The pupil should not be led to think that he is being trained in the practice of analytical chemistry.

The course should include the study of a suitable text, accompanied by experiments done by the pupil to show the method of preparation and the properties of various substances. These should be supplemented by demonstrations by the teacher, showing the quantitative relations concerned in some fundamental reactions. The pupil may thus become familiar by observation with the experimental evidence of the more important quantitative laws, and thus realize that our present theories have been deduced from and are not the causes of the facts observed.

With this in view, most of the time commonly devoted to qualitative analysis may well be given to more thorough work in general chemistry. Analytical work in the high school, unless under the guidance of a very exceptional teacher, is limited in its instructional value and has little direct application unless supplemented by more advanced study and practice.

Not less than one year should be given to the study even in its elementary outline. Three recitations and two laboratory periods per week is a desirable arrangement. Very little is gained from a course in chemistry without laboratory work. Unless a high school can afford a fairly good equipment for laboratory work chemistry would better not be taught at all. Work tables, with gas and water attachments and a complete supply of materials and apparatus needed for the course should be provided. To put a heavy burden upon the instructor by placing him under the necessity of spending half of his time in devising apparatus out of a lamentable scarcity of material is unfair to student and instructor.

It is always best to furnish each student with as complete an outfit as possible, and to hold him responsible for the same. A list of the supplies needed should be sent to a number of firms for quotations on prices. In ordering any piece of apparatus a certain form in some catalogue should be designated; otherwise it will be impossible to compare prices.

PHYSICAL GEOGRAPHY.

Text: High School Geography, Complete—Dryer.

For schools teaching this science the following outline has been prepared, and it is recommended that the division of the work be as follows:

First Half Year.

PART I.

Second Half Year.

PARTS II AND III.

Although this is known officially as a course in Physical Geography, that term does not fully describe it. The physical geography of the first half of the course is designed to serve as a basis for the economic and regional geography which follow. The relations of these different phases of geographic science are dis-

cussed in the text on pages 5-7, which should be read. The paragraph and chapters on economic relations emphasizing the relations of physical features and conditions to human affairs should be given due prominence; to cover the whole ground of the text in one school year is possible only for a strong class using five periods a week for nine months. Teachers who have less time at command should select from the text such a course as seems best suited to their conditions, as the physical and economic geography of Parts I and II; the more important provinces of Part III; the supplementary chapter on Indiana.

PART I.

Chapter I. Latitude and Longitude are as fundamental in geography as notation in Arithmetic. Students should be drilled in using them upon the globe and all sorts of maps until perfection is attained.

Failure to understand the change of seasons is due largely to neglect of observation. The points of sunrise and sunset, the path of the sun in the heavens, the angles of the sun's rays and the length of the day at different seasons are important geographical facts open to common observation.

A map is a kind of technical language which the student must learn to read as he learns the symbols of mathematics and chemistry. No other science possesses a means of expression equal in efficacy to the map. We all carry a mental map of some part of the earth, and the purpose of geography may be said to be, to make that map as extensive, clear, exact and detailed as possible. Most of the maps in the text are drawn on Mollweide's or Mercator's projection, and the differences between them (compare Figures 162-164), should be carefully noted. The problems of teaching locational geography, in which students are often lamentably deficient, may be largely solved by observing the following rules:

No lesson in geography which can be illustrated by a map (and there are few which cannot) should ever be given without having the appropriate maps hung before the class. Use the best map procurable. A railroad folder is better than none. *A student should never be permitted to talk about any feature which can be shown on a map, without being required to point out that feature on a map.*

Pictures, postcards, stereoscopic views and lantern slides are needed to supplement the maps and enable the student to substi-

tute for his mental map a mental picture of the region as it actually exists.

Chapter II. This chapter cannot be adequately taught without the use of large scale, physical wall maps. The nature of the continental shelf and the distinction between continental platform and oceanic basin are fundamental. A drill in locating upon the map and naming the principal features of the continents may profitably occupy a week or two.

Chapter III should be discussed with the class and *taught* without the expectation that the students will appreciate it at this stage.

Chapters IV and V deal with materials, forms and processes which are of world wide occurrence. For their mastery two things are essential: (1) *field work* and (2) *the use of contour maps.* There is not a township, hardly a square mile in the state which does not exhibit some variety of material, relief and gradation which will richly repay study. All that any teacher or class can do is to make use of whatever is accessible. To the drift covered portion of Indiana the ice sheet has brought a larger assortment of pebbles and boulders than can be studied. Clay, sand and gravel are always at hand. Many counties have numerous quarries and outcrops are exposed along the banks and bluffs of streams and in railroad and highway cuts. A small stream may be better for study than a large one because more of it can be seen. To most towns the extension of car lines has made a large territory accessible. Let every teacher take his own field as he finds it and make the most of it. No first-rate knowledge of relief and gradation can be obtained in the school room only.

The general structure and relief of the state are described and mapped in the supplement to the text, pp. IV to XIX. A physical map of the locality is of great assistance. Many such can now be obtained at little or no cost. The Department of Geology and Natural Resources has published soil maps of many counties which may be had on application to the State Geologist, Indianapolis. The United States Department of Agriculture has published soil maps of a few Indiana counties. Of the Topographic Atlas of the United States, the following sheets of contour maps, wholly or partly in Indiana, have been published: *Beogonia Springs, Bloomington, Boonville, Clay City, Danville, Ill., Haubstadt, Kosmusdale, Ky., Mt. Carmel, Newburg, Ky., New Harmony, Owensboro, Ky., Petersburg, Princeton, St. Meinrad, Tell City, Tolleston, Velpen.*

They may be had from the U. S. Geographical Survey, Washington, at ten cents a sheet, or six cents each for fifty or more. Figure 31 of the text is a part of one of the Indiana sheets and all the other contour maps are taken from a similar source. Such maps are the best representatives of relief yet designed and will repay the time and effort necessary to render a student proficient in his interpretation of them.

Chapter VI. The general statements of this chapter should be made concrete and realistic by reference to all the economic uses made of the streams in the vicinity of the school or within the student's observation.

Chapters VII and VIII. Two thirds of Indiana is covered by a sheet of glacial drift, as shown in the supplement, p. VI. This map and pp. X-XIV indicate the glacial features which may be looked for. Here again field work is essential. Northern Indiana furnishes the best opportunities for the field study of lakes.

Chapter IX. The study of ground water should include an investigation of wells in the vicinity of the school. The sink hole and cave region of Indiana is unrivalled for the study of subterranean drainage. The southern shore of Lake Michigan furnishes excellent examples of wind action in the formation of coast dunes.

Chapter X. Soils are to be found everywhere. They may be roughly analysed by shaking up, in a bottle of water and letting it stand to settle. The proportions of clay, sand, and gravel will be clearly shown.

Chapters XI and XII. It is difficult to study the sea in Indiana because it is unaccessible and few teachers or students know anything of it by experience. The most should be made of Figures 16 and 150. The large space given to coasts, ports, and the human aspects of the sea indicate where emphasis should be laid.

Chapters XIII-XV. The study of the atmosphere is made more difficult by the facts that it cannot be seen and that many of its conditions can be learned only by the use of instruments. On the other hand the air is everywhere present and its conditions are constantly changing. A book knowledge of it without personal observation is of little value. People talk more and know less about the weather than any other topic. Yet if systematic and continuous observations are made it is easy to become intelligent on the subject. Thermometers are necessary and a barometer almost as much so. Readings of temperature, pressure, wind direction and state of sky thrice a day, carried on in connection with a study

of the daily weather map for at least six weeks, preferably in the winter, will give a grasp of the nature and effects of the cyclones and anticyclones that control Indiana weather. Climate is made up of generalizations of states and must be learned chiefly from maps and exposition of the texts. Figures 159 and 160 are fundamental and Figure 164 ought to be almost memorized, because it forms the basis of many chapters which follow. Figures 165-166 show the causes of the phenomena shown in Figures 171 and 172, of which Figure 170 is a key diagram to be *burned in* for ready use. The nearest weather bureau station will supply daily maps similar to Figures 177-180. Figure 185 shows the results of the conditions and processes previously studied, and Figure 188 is a summary of all the factors of climate classified according to temperature and rainfall under twelve well marked types. Its importance may be judged from the fact that it forms the basis of Figures 192, 239, and 301, upon which Parts II and III are organized. On the whole, climate exercises more influence upon human affairs, than does relief, and is correspondingly important in Geography.

Chapter XVI. Vegetation is a visible expression of soil and climate, and as the basis of human economy, may be called the master-key to geographic relations. Some knowledge of Botany is desirable, but not much is necessary to a fair understanding of the climatic control of plant distribution and human industries dependent upon plants as set forth in this chapter.

Chapters XVII and XVIII. The present distribution of animals, including man, is due so largely to conditions which existed so largely in the remote past that it is difficult for the geographer to bring it into close relationship with relief, climate and vegetation. Fishes in the sea, birds in the air and black men in Africa may be accounted for, but tigers in India, giraffes in Africa, blond, enterprising and world colonizing people aroung the Baltic and Yellow Seas, stay-at-home people in China, are problems which cannot be well discussed without the aid of the geologist and the ethnologist.

PART II.

Chapters XIX and XX. The economic geography of the text is designed to show the intimate relationship between human life and the natural conditions and resources of all parts of the world. In the business of getting a living, plants, animals, and through them climate play the most prominent parts. The supply of food

and clothing is almost wholly—and of constructive materials largely—dependent directly or indirectly, upon climate; hence, in this discussion of materials constant reference is made to the climatic and plant regions of Figures 188 and 192, enlarged copies of these maps should be hung before the class and used to locate regions referred to. Mineral resources are but little influenced by climate, but their distribution is intimately related to structure and relief. The general principles of economic geography should be constantly illustrated by local examples and applied to the economies and industries of the home community.

Chapter XXI. Modern industrial civilization is based upon an increasing use of artificial heat, light, power, and these are obtained chiefly from mineral fuel and the energy of running water. The great factors are coal, iron, and water power. The origin and distribution of coal and iron are problems of geology rather than of geography. Their geographical relations are chiefly on the human side and are there supreme. Too much emphasis cannot be laid upon the influence of the coal and iron fields of the United States, Canada, Great Britain, Germany and Belgium upon the industries, wealth and progress and power of those countries. Water power is a product of railfall and relief and is rapidly assuming a part in the human affairs second only to that of coal.

Chapter XXII. The study of trade and transportation constitutes a department by itself called *commercial geography*. To pursue it successfully requires the widest possible knowledge of physical, economic, and regional geography. The brief outline here given may serve at least to open the door into this most complex subject.

Part III.

Chapter XXIII. The regional geography of the text is based upon the national provinces of Figure 301 for reasons given in this chapter, which should be carefully studied. The national provinces are almost the same as the climatic regions of Figure 188, but are modified somewhat by the physiographic provinces of Figure 57 and the plant regions of Figure 192.

"In the study of regional geography the main purpose is to discover how the natural environment influences or controls human life, and the various ways in which human life responds to the environment and reacts upon it. To understand such relations

the student must know (1) the natural features and conditions of the region, and (2) the human activities which prevail there.

"Natural factors, in their general relations to human life, have all been discussed in Parts I and II. In Part III the same factors and relations are studied more closely, as they are found in different natural environments. The division of the land into natural provinces is based upon the temperature belts and rainfall regions, as shown in Chapters XIII to XV. It is advisable to begin with a thorough review of Fig. 164 with p. 181, and Fig. 185 with pp. 212-218. This should be followed by a study of Figs. 188 and 192. Chapter XXIII should be discussed and explained by the teacher with constant reference to Fig. 301 and the key, p 330, until the principles are thoroughly understood. No attempt should be made to commit to memory *(all at once)* pp. 335-9. The natural provinces are designed as the fundamental units of study and may be taken up in the order of the book, which places the most important first, or in the order of the simplest first, which is easier and more logical. If the latter plan is adopted, the class should begin with the Greenland province, pp. 512-515. The order, then, is the American Arctic province, pp. 511-512; the Canadian province, pp. 508-511; the Alaskan province, pp. 505-508; the Arizonan province, pp. 400-411; the American Interior province, pp. 391-399; the Mexican and Caribbean provinces, Chap. XXXIII; the Californian and Oregon provinces, Chap. XXVII, then Chaps. XXV and XXVIII. The remaining provinces may be studied in the order of the text, or the teacher may select such provinces as seem most important and interesting, or such as he has the best material and facilities for teaching. The teacher should not feel bound to follow the order of the book, if for any good reason he thinks some other order better adapted to the conditions and requirements of his school and class.

"Only one rule should never be overlooked. The class must have a good knowledge of the natural factors of each province,—relief, drainage, climate, and plant life,—before taking up the study of the people and their activities. For success by the method of natural provinces the student must be well grounded in the characteristics of each type to be studied as given on pp. 335-339 and in Fig. 301. To take the simplest example, the Greenland province. Locate the province on Figs. 301 and 302. Learn the structure and relief from Figs. 16, 57, and 302, and from a good colored relief wall map. Use the index of the text to find various state-

ments about Greenland. Study paragraph on p. 342, giving special attention to the terms "broken block plateau" (see p. 63), "ice cap" (see p. 117), "fiords" (see pp. 163 and 164), and "crystalline rocks" (see pp. 37 and 38). The climatic conditions are described on pp. 222-224 and the vegetation on p. 242. With these facts in mind, the student is prepared to understand pp. 512-515. The caribou is shown in Fig. 213; the musk ox, Fig. 216; seal and walrus, Fig. 210; an igloo, Fig. 270. The topics to be emphasized are: ice cap, ice floe, sea, seal, kayak, harpoon, igloo, lamp, dog, sledge. When more definite information is needed, use the index of the textbook, the dictionary, the encyclopedia, the atlas, and the reference books."

Chapter XXIV. Figure 382 and the text present the relief and structure of North America, as distinguished from climate and vegetation upon which the provinces of figure 381 are based. It may be studied as a whole, or perhaps a better plan is to take it up piecemeal, as it is needed in the study of the successive natural provinces.

Supplement on the Geography of Indiana. This should be studied toward the end of the course, at least not earlier than Chapter XXV, although it may be used at any time as a guide in the study of local geography. Indiana should be treated as essentially a portion of the Glacial Drift Plain and of the Mississippi Province, and the consequent correlations should therefore be kept in view.

References.

Salisbury: "Physiography" (advanced course).
Powell and others: "Physiography of the United States."
Shaler: "Aspects of the Earth."
Geikie: "Fragments of Earth Lore."
Dryer: "Teachers' Manual of High School Geography."
Russell: "Lakes of North America"; "Rivers of North America"; "Glaciers of North America"; "Volcanoes of North America."
Brigham: "Geographic Influences in American History."
Semple: "American History and Its Geographic Conditions."
Marsh: "The Earth as Modified by Human Action."

COMMERCIAL GEOGRAPHY.

(Text: Commercial Geography—Adams.)

Work Essential for the Teacher.

1. Study of the literature of the subject.
2. Determination of the purpose of instruction.
3. Outlining the course.
4. Accumulation of teaching material.

(In a general way this course will touch upon the two questions of teacher-preparation of the subject and methods of instruction.)

1. Reading.

First of all, read the text with the student's attitude toward it. This book treats of all the peoples of the earth and sets forth their lands, products, and industries, as well as their connection with our commerce. It makes little difference whether the class-work is to be limited to the United States or is to cover the entire field of the world's trade, the teacher's general reading should be the same. It is impossible to teach any part of the great subject of commerce without a broad knowledge of the conditions underlying trade throughout the world. The first reading of the text, therefore, should be for the general view of the subject. This study will stimulate and determine collateral reading, which should be curtailed only by the limit of the time available. A study of the material contained in the Statistical Abstract, published annually by the Treasury Department, should follow, for a better grasp of the immensity of the products of the United States. The Year-Book published by the Agriculture Department treats of the agricultural products of the country in comprehensive detail. The Statesman's Year-Book (American edition) is one of the truest compendiums in English of facts relating to the commerce and industries of all countries.

In addition to the study of these books, the teacher will find the need of a good physical geography.

2. Determination of the Purpose of Instruction.

Whether the course is to be limited to the United States and her colonies, or is to include the United States and all other Anglo-Saxon countries, or whether the entire subject presented in the

text is to be undertaken, it will be admitted that there must be such a presentation of the subject as will establish fundamental principles in wide application. Whatever the scope of the course, it should familiarize the student with—

a. The important areas of production of all the leading articles entering into commerce.
b. The important areas of consumption.
c. The means of carriage from the producer to the consumer.
d. The basal facts relating to the larger manufacturing industries; and,
e. The causes that effect commercial and industrial development.

It will be the teacher's problem, before beginning actual classroom instruction, to determine—

1. The knowledge of the subject which is to be secured from pupils.
2. The mental training which is to be aimed at.
3. The outline of the course: the parts of the book which are to be omitted and those which are to be studied, with the time allotment for each division of the subject to be undertaken.

Knowledge of the Subject to be secured (from pupils)—

a. Broad, general principles which are to be illustrated and enforced by every phase of the subject.
b. Detailed knowledge of a given portion of the text to conform to the time allotted to the work in the school curriculum. It is presumed that, at the least, thirty-six "periods" or recitations will be given to Commercial Geography, where it is deemed desirable to place it in the list of studies; also, that under the most favorable conditions for a year's instruction not more than one hundred and eighty periods of classwork should be assigned.
c. Knowledge of certain phases of commerce or geography selected for stress of consideration and determined by the locality of the school. Such work would vary widely in different localities.
d. Knowledge of a few special topics upon which research-work by able pupils should be done and the results presented to fellow students.

3. OUTLINING THE COURSE.

The most valuable service which this course can render to teachers is, perhaps—

a. To urge upon them the necessity of some very definite plan of the course which they are to give.

b. To warn them against accepting any plan, no matter by whom devised, which is not based upon a careful consideration of *purpose* and existent *conditions* of school work.

Such a plan as is here set down can be rationally used only when the conditions which dominated its production are the actual conditions of the school where it is proposed to adopt the plan.

For schools teaching Commercial Geography, the following outline of work is recommended:

Total, 90 Lessons.

Introduction	lessons— 9
United States	lessons—36
Other countries	lessons—30
Scattered reviews	lessons—15
	90

Introduction:

One lesson on basis of history of commerce. Talk by teacher on origin and development of commerce with the purpose of developing general principles.

Five lessons based on Adam's introduction, Chapters II, III, and IV. Subjects:

Effect of climate and physiography upon production.

Effect of physiography upon location of towns.

Two lessons on basis of Chapter V, study of transportation in general:

a. Different means; comparison as to value for specific purposes and under certain conditions.

b. Routes; reasons for, value of railroads, canals, steamships, etc.

One lesson on basis of Chapter VI, study of governmental work for protection and encouragement of commerce.

United States.—In studying each commodity, pupils should be directed to do outside reading, using the index as a guide, in order to get a world-wide view of such subjects as sugar, cotton, wheat,

etc. (The figures denote the order in which the lessons are to be given.)

1 and 2, climate and natural conditions of country; 3 and 4, grains; 5 and 6, sugar, fruit, etc.; 7 and 8, meat and fish; 9, 10, 11, fibers; 12 and 13, wood and its products; 14 and 15, petroleum and coal; 16 and 17, iron; 18, other minerals; 19-24, manufactures; 25-29, transportation; 30, summary; 31 and 32, United States colonies and Cuba; 33-36, reviews.

Reviews.—After the completion of the United States, the colonies, and Cuba, as outlined above, the review should be planned under the following heads:

1. Areas of production (grains; sugar; coal, iron, and other minerals; forests, cattle, etc.).
2. Areas of consumption (through manufactures, use as food, exporting, etc.).
3. Transportation (carriage from producer to consumer).
4. Cause and effect of commercial development.

In addition to these topics, the teacher will naturally divide the United States into its sections—i. e., the New England States, Middle Atlantic—for localization of products, industries, and industrial growth. The same ground may be gone over advantageously by classifying by-products—i. e., the cotton States, the corn belt, etc.

Topics for Reviews:

1. Statistical work—comparison of export trade of ports (e. g., New York, Boston, etc.).
2. Graphic map-work—direction of traffic in four or five chief exports.
3. Prospects for the Western States.
4. Commerce (import and export trade) of New England, New York, and Pennsylvania.
5. Industries of the South.

Special Topics:

1. The business of a railroad center.
2. The ocean trade (of the city of Boston or other ports).
3. The business of a distributing center.

Other Countries.—Time scheme (the figure gives the number of lessons): 2, Canada and Newfoundland; 3, Great Britain and Ireland; 3, Germany; 3, France; 2, Belgium and the Netherlands; 2, Russia in Europe and Asia; 2, Austria, Hungary, and Italy;

2, India; 1, China; 2, Japan; 2, Australia; 2, Africa; 2, Central America and Mexico; 2, South America. Total, 30 lessons.

Reviews.—Suggested topics (special): Marketing of petroleum; moving of grain; estimating cost in labor and investment of capital of one meal; United States agricultural machinery in foreign markets; corn; wheat; iron; cotton; the world's beverages, etc.; English trade—statistical and descriptive; German competition in Europe's markets.

Some of the above, as wheat, or iron, can be done by the class as a whole, others can profitably be used as special topics assigned to selected individuals.

The school library should be made as full and as serviceable under the head of Commercial Geography as under Literature or History. Whether this result can be secured is not entirely a question of school funds, though a liberal allowance of money can be most advantageously expended. Through the energy of the teacher, much of the literature of this subject can be collected without cost. Many Government publications are made with the sole idea of broadening and bettering public information; heads of bureaus are given discretion to issue their publications to schools and colleges, upon application.

The reports of chambers of commerce, commercial exchanges, and of many large corporations may be obtained as easily as Government documents.

A number of school geographies, both physical and political, and a reliable atlas should be placed in the class-room for the use of students.

Maps.—Map of the world, showing cable and steamship routes. (Navy Department, Hydrographic Office.)

Cuba.
Philippines.
China and Japan.
East Indies.
Europe.
United States, North America.

A list of the maps of the United States Coast Survey may be procured from the department at Washington.

Many railroad maps, though crude and inaccurate, are illuminating to the study of transportation. "Folders" of any railroad in this country are easily obtainable. The big steamship companies print a great deal of information which may be used to advantage.

Newspapers and Magazines.—The magazines contain many articles which treat of American commerce. These, torn from the magazine and bound by themselves in stout paper covers, will soon provide a valuable pamphlet library.

Clippings on commercial subjects—e. g., Pacific Cable, Isthmian Canal, etc.—should be requested from all students; this will insure careful daily reading upon current trade topics. Few of these clippings are desirable for general class use. As a consequence they should be filed in large envelopes; once in a few weeks they should be sorted by competent students, or by the instructor, and those of more than ephemeral value classified and pasted into a large scrap-book. Of course, the use of a good filing and index system is more desirable than the suggested envelopes and scrap-books.

Illustrations.—It should be the teacher's aim to collect within a few years a large number of valuable illustrations relevant to the peoples and customs of all nations of the earth. It will not be difficult to find "process" pictures of every sort of product, all kinds of manufactures, and of the various means of transportation; the date palm of the desert, the manufacture of beet sugar, packing tea in China, the ocean greyhound, etc. The illustrations of Adams's Commercial Geography are an example of the excellent work which is everywhere to be found. A filing cabinet can be improvised with a little ingenuity. (48-R-3, Library Bureau.)

If the school owns a lantern, slides can be made by copying many of the best of these illustrations. Slides may also be purchased or rented to illustrate almost any subject. Lectures by business men, travelers, or teachers, illustrated by the lantern, upon such a subject as sugar, for example, will create a lively interest in geography, commerce, and politics.

COURSES OF STUDY IN INDUSTRIAL ARTS FOR THE HIGH SCHOOLS.

A. Courses in Industrial Arts.

For statement of aim or purpose of work, bibliographies, lists of equipment, and detailed suggestions, etc., see Introduction to Vocational subjects in course of study for Elementary Schools and Vocational Bulletin No. 1, issued by the Department of Public Instruction.

I. Outline of Work in Mechanical Drawing—First Year.

1. Development of simple floor plans of houses and such farm buildings as may appeal to the pupil.
2. Making of plans from sketches of the school grounds and buildings.
3. Modifications of the above plans as suggested improvements.
4. Drawing of forms for cement posts, steps, watering troughs, etc.
5. More advanced problems in intersection of solids.
   (a) Type solids of different sizes.
   (b) Development of surfaces of these solids.
6. Working drawings of some advanced project in woodworking, involving more complicated construction and original design if possible.
7. Working drawings of more complicated machine details and machinery, such as farm machinery, vehicles, engines, etc., from sketches made by the pupil from the original.
8. Mechanical movements and their development.

Note.—The instruction in drawing in many of the high schools may well be given a direction by applying it to such subjects as the planning of farm buildings, mapping of farm grounds, planting of the garden, etc., in the case of boys, and for girls, in drawing and designing articles of clothing, decorations, or in the arrangement of rooms. In this connection there should be preliminary instruction in elementary mechanical drawing, teaching the use

of simple drawing instruments, drawing to scale, etc. It is believed that the usual course of instruction in art so-called can be given a very useful and no less educational value by giving heed to conditions and materials readily available in rural schools or rural homes and at the same time furnish to the pupil practical instruction of definite application and use to him in the future. See also outline for four years' course in industrial work for township high schools, Vocational Bulletin No. 1.

II. Outline for Bench Work in Wood—First Year.

1. *Wood Finishing.*
   a. Scraping and sandpapering.
   b. Staining.
   c. Fillers.
   d. Waxing.
   e. Varnishes.
   f. Paints and painting.

2. *Principles of Saw Action and Saws in General.*
   Demonstration of saw filing and practical examples executed by the pupil, using sheetiron strips for practice at first.

3. *Construction.*
   1. Umbrella stand.
   2. Dining chair.
   3. Folding sewing table.
   4. Reclining porch chair with canvas back and seat.
   5. Step ladder.
   6. Settee.
   7. Tool chest with trays and partitions.
   8. Work bench.
   9. Porch swing.
   10. Table (mortise and tenon joints, rails, etc.)
   11. Shaving stand.
   12. Music cabinet.
   13. Rocking chair.
   14. Writing desk chair.
   15. Morris chair with adjustable back.
   16. Chicken brooder.
   17. Yard and field gates.

Note.—It is intended that the lists of projects given here and in the course for seventh and eighth grades shall be suggestive only. They should be supplemented by other projects, and selections made as desired. The number of pieces made in any year may be determined by the time given to the work and the facilities at hand.

It is also suggested that pupils be guided, as far as possible, in the repair of all tools.

For bibliography and list of equipment, see Vocational Bulletin No. 1.

B. Outline of Work in Domestic Science.*

The following outline of work in domestic science is sufficient for two years' work of five double recitation periods per week. The two general lines of work, sewing and cooking, may be conducted simultaneously, or the first year may be given to one and the second year to the other. For detailed directions and help, see regular course of study in Vocational Bulletin No. 1.

I. *Foods and Their Preparation.*

a. Recitation work.

1. The model kitchen.
2. Methods of cooking, with definitions.
3. Methods of cleaning a kitchen.
4. Food and its uses to the body.
5. Carbohydrate foods.
6. Protein foods.
7. Planning a meal.
8. Serving a meal.
9. Salads and desserts.
10. Breads and bread-making.
11. The use of left-overs.
12. Furnishing a dining room.
13. The care of the dining room.
14. The duties of a hostess.

*Helpful suggestions for the work in "Domestic Science" may be obtained in Vocational Bulletin No. 8.

b. Laboratory exercises.

1. Discussion of cooking utensils.
2. Canned fruits, preserves and jellies.
3. Cooking of vegetables.
4. Meats and their cookery.
5. Quick breads.
6. Yeast breads.
7. Salads.
8. Cakes.
9. Desserts.
10. Planning and serving a breakfast.
11. Planning and serving a dinner.
12. Refreshments to be used for parties.

II. *Sewing and Textile Fabrics.*

a. Recitation work.

1. The work basket.
2. Definitions used in textile work.
3. Cotton—its history and manufacture.
4. A study of cotton materials.
5. Linen—its history and manufacture.
6. A study of linen materials.
7. Wool—its history and manufacture.
8. A study of wool materials.
9. Silk—its history and manufacture.
10. A study of silk materials.
11. Rules for buying materials.
12. Textile adulterations with tests for adulterations.
13. Buying table linen.
14. A discussion of carpets.
15. Materials suitable for draperies in house furnishings.

b. Laboratory exercises.

1. Basting, hemming and running, on models.
2. Seams.
3. Mending and darning.
4. Patching.
5. Use of sewing machine.
6. Cutting and making of simple undergarments and wash dresses.

III. *House Furnishing.*

a. Recitation work.

1. House plans.
2. Yards and gardens.
3. Kinds of building material and their uses.
4. Wall paper, paints and stains.
5. Carpets and rugs.
6. Draperies.
7. Buying furniture.
8. Furnishings for the living room.
9. Furnishings for the bed room.
10. Care of bedding.
11. General rules for cleaning a house.
12. Entertaining in the home.

b. Laboratory work.

Make collections of wall papers, carpet samples and curtain materials. Booklets may be made in which are placed pictures of both good and poor types of furniture. Compositions should be written describing each room and its furnishings.

Trips to a furniture store will make the work more interesting.

IV. *Laundry Work.*

a. Recitation work.

1. Reasons for washing clothes.
2. Equipment for laundry work.
3. Preparation of water.
4. Soap—kinds and uses.
5. Starch—making and use.
6. Washing flannels.
7. Laundering colored clothes.
8. Laundering table linen.
9. Laundering doilies and laces.
10. Ironing.
11. Folding ironed clothes.
12. Care of laundered clothes.

b. Laboratory work.

Any place where laboratory work is possible it is a good thing to have demonstrations in methods of doing this work. Under other conditions the girl might do some of the work at home and bring it in for examination.

V. *Hygiene.*

a. Recitation work.

1. Dirt and its dangers.
2. Personal hygiene.
   a. Care of teeth.
   b. Care of nails.
   c. Care of skin.
   d. Care of hair.
3. Using the body correctly.
4. Clothes in relation to health.
5. Fresh air and its relation to health.
6. Contagious disease and its meaning.
7. Laws governing quarantine.
8. Emergencies.
9. Rules for the sick room.
10. Preparing the invalid's tray.
11. Impure water and its dangers.

C. Outline of Work in Agriculture.

Pre-vocational subjects in the high school must be taught not less than five periods weekly throughout the year, with double periods allotted for laboratory exercises, in order to be credited for graduation.

There should be no attempt to teach the broad general subject of agriculture, but rather some specific phase, the selection of which will depend upon local conditions and the preparation of the teacher who is to present the subject. In most cases the calendar becomes a factor in determining the work from week to week. The skilled teacher will be quick to correlate this work with the instruction in botany, zoology, chemistry, or physics, or, where the pupils have not had the benefit of instruction in these subjects, to supplement by simple explanations.

A number of subjects are outlined in the course, some of which will constitute sufficient work for a year, others for a half year each, and in case so much time can be given, a sequence may be arranged running through two or three years. A knowledge of the soil and of its products or crops is fundamental and these subjects should receive first attention, to be followed, if desired, by instruction in other special topics.

The Department of Public Instruction has published a detailed course of study for agriculture which gives references to helpful literature. This should be followed by teachers of this subject.

I. *Soils and Soil Fertility.*—Work for on year.

a. Outline of topics for classroom study.

1. Conditions necessary for plant growth.
2. Origin and formation of the soil.
3. Agencies of soil formation.
4. Physical properties of soils.
5. Soil water.
6. Control of soil water.
7. Drainage.
8. Tillage.
9. Mulches.
10. Rotation of crops.
11. Organic matter of the soil.
12. Farm manure.
13. Green manure.
14. Commercial fertilizers.
15. Lime.
16. Bacteria.
17. Inoculation.

b. Outline of Laboratory exercises.

1. Practice in securing soil samples.
2. Practice in preparing soil samples for laboratory use.
3. Approximate mechanical analysis of soils.
4. Collection of types of soils.
5. Effect of drainage and slope on the temperature of soils.
6. Practice in planning and conducting fertility plot or pot test.
7. Effect of temperature on the germination of seeds.
8. Effect of depth of planting on germination of seeds.
9. Problems in calculating the kind of plant food removed from soils by the principal farm crops.
10. Problems in calculating formulae for the compounding of fertilizers.
11. Problems in calculating saving of plant food by feeding live stock as compared with selling crops.
12. Study of the characteristic properties of various forms of lime used in agriculture.

13. Determining the relative solubility of various nitrogenous materials.
14. Same, using potash fertilizer materials.
15. Same, using phosphorous fertilizer materials.
16. Determining water holding capacity of soils.
17. Determining kind of organic matter in soils.
18. Studying the power of soils to absorb plant food in solution.

II. *Farm Crops.*—(Adapted for fall and winter study). A course of laboratory exercises to be supplemented by reference, reading and reports upon botanical and commercial characteristics of the more important farm crops. The exercises are not necessarily to be given in order as named. Regard must be paid to the season and collections of material made in the fall for winter use.

1. Collection and labeling and study of weed seeds.
2. Study of purity of commercial farm seeds, such as clover, alfalfa, etc.
3. Study of the vitality of seeds by germination tests.
4. Study of the mature plants of grains from observed specimens, involving physical and botanical observations and comparisons.
5. Study of crops in the field, corn plant especially adapted.
6. Determining leaf surface area, especially in corn.
7. Study and comparison of the various clover seeds, including alfalfa.
8. Study and comparison of various clover plants, if possible in the field.
9. Study of grains, particularly oats, with reference to percentage of hull and weights of grains from different varieties.
10. Treatment of oats, barley, potato, wheat, for preventing diseases.
11. Effects of temperature on germination of seeds of farm crops.
12. Study of grading and valuing grain according to market standards.
13. Scoring and judging grain.

III. *Gardening and Garden Crops.*—(Adapted for spring and summer study.)

1. Make a study of typical home gardens by scoring and comparing with reference to the following points: location, soil adaptability, variety of vegetables grown, garden plan, tillage, tools used, freedom from weeds, health of vegetables, and yield.
2. Vegetable study. Comparison of varieties of the common garden vegetables with reference to botanical and commercial characteristics.
3. Identity of garden seeds. Collection and study of garden seeds with particular reference to their purity, germinating power, etc.
4. Planning the garden with reference to the arrangement of its planting and list of available and suitable vegetables to be used.
5. Testing of garden seeds.
6. Hotbeds and their construction, preparation, and operation.
7. Study of garden problems as to selection of crops, managing, marketing, study of local and foreign markets, methods of preparing and packing vegetables for market, etc.

IV. *Horticulture.*—Outline of subjects for classroom study, accompanied by field and laboratory demonstration. Work for one year.

1. Horticulture, its scope and divisions.
2. Size, grading and packing fruit.
3. Harvesting and storing of fruit.
4. Marketing methods.
5. Propagation of fruit plants.
6. Pruning for renovation.
7. Pruning bearing orchards.
8. Shaping and training fruit trees.
9. Insect and fungous diseases.
10. Measures for controlling diseases.
11. Orchard fertilizers.
12. A study of orchard renovation.
13. Planting a young orchard.
14. Management of a young orchard.
15. Influence of weather in fruit growing.
16. Thinning of apples.

V. *Dairying.*—The subject includes classroom exercises, laboratory practice with milk and milk products and observation and study of dairy herds and dairy conditions. Work for one year.

1-2. Elementary study of breeds of dairy cattle.
3-4. The care of young dairy animals.
5. Types of dairying.
6. The silo.
7. Ensilage.
8. The dairy barn.
9-10. Milk testing.
11-12. Butter making.
13. Cream separation.
14. Relation of dairy to soil fertility.
15. Feeding the dairy cow.
16. Characteristics of the dairy cow.
17. Study of a small farm dairy.
18. Marketing of dairy products.

VI. *Fungous Diseases and Insect Pests.*—These studies will involve the collection of material, study of their characteristics and habits and of preventive measures for their restriction.

1. Study of scale insects.
2. Study of chewing insects.
3. Observations of various diseases infesting fruit trees.
4. The preparation and qualities of various fungicides.
5. Spraying.

VII. *Poultry Husbandry.*—This should include classroom discussions, study of reference literature, laboratory exercises in judging and scoring poultry and eggs, home study of flocks, and visits to poultry farms, markets, etc. Work for one-half year.

1. General discussions of the poultry industry.
2. Classes, breeds, and varieties of poultry with their general characteristics.
3. The selection of poultry for various purposes and the origin and history of the more important breeds.
4. Poultry housing.

5. Feeding.
6. Marketing.
7. Incubation, natural and artificial.
8. Breeding.
9. Poultry diseases.

VIII. *Animal Husbandry.*—This outline may be presented during one-half year and should consist of lectures and recitation work supplemented by live stock judging and observation visits to local herds.

1. Breeds and types of live stock. Four weeks.
2. Live stock breeding. Four weeks.

Main Topic Outline of a One Year Course in Vegetable Gardening for High Schools.

Work planned on basis of pupils' doing the actual work on plots at their homes (at least 1-10 of one acre).

From September to January 31st.

1. Study soils on which vegetables will be grown. (Kind, temperature, etc.)
2. Measure plots and make detailed plans of gardens. (Include succession crops, etc.) Plans uniform for a given school.
3. Study drainage of plots to be used.
4. Fertilizers for plots to be used.
5. Kinds and varieties of vegetables to be used.
6. Construct hotbeds and cold frames.

From February to July.

7. Secure and test seeds.
8. Methods of planting in hotbeds and cold frames.
9. Transplanting.
10. Preparation of seed bed.
11. Time and depth to plant in open field.
12. Methods of cultivation.
13. Diseases.
14. Methods of control of disease.
15. Pests.
16. Methods of control of pests.

17. Preparation of fresh vegetables for market.
18. Methods of canning vegetables.
19. Methods of marketing canned vegetables.

The division of topics with regard to months is not an arbitrary division.

July and August.

Can Vegetables.

Detailed record of cost, income, profit or loss, methods employed, etc., must be kept by each pupil.

MUSIC.

Provision for the teaching of Music at least one period a week during the four years of the high school work is required. It is an elective in all commissioned high schools unless the *local school authorities* rule to the contrary.

Credit toward graduation may be granted for work in Music in proportion to the amount of time given the subject.

If Music is taken one hour per week for one year, one-fourth of one *credit* may be granted, and one *credit* or one-half unit for the four years' course.

If credit beyond this is given for Music work it must be in accordance with the plan for the other subjects, in that there must be preparation and actual hours of recitation which may be credited in proportion to the hours spent.

It is well to note that these credits do not count as college entrance credits in Indiana colleges.

The vitality of a course of music in high schools is determined by three elements: First, the attitude of the students toward the subject; second, the musical material; and, last, the teacher. Of these determining factors, the first depends largely upon the second and third. Given a supply of good music that appeals to the pupils and given also an enthusiastic and inspiring teacher, the best possible beginning has been made.

Many standard high school music books offer a good selection of material, and most publishing houses carry a good line of the right sort of supplementary music, costing only a few cents a copy.

Generally speaking, music with good strong words should be selected. Avoid the commonplace both in music and words. But it must be pleasing to the pupils or they will not enter heartily enough into the work to make their music study a real means of education.

Variety in the music to be used is necessary, and this applies to each lesson; hard work can be gotten from a music class through an entire music period if the pieces offer sharp contrast to one another. Unison songs are good because they unite the class in the same melody, thus emphasizing the idea of unity. Part songs

are good for a different reason. They appeal to and educate the sense of harmony and widen the musical horizon of the pupils. It will be wise to use both kinds of songs.

During the music lesson no time should be lost and the subject should not be allowed to drag. If a piece proves not to be acceptable upon any particular day, it is wise policy to quietly turn to some other more congenial song. Do not work too long upon any one difficulty; stop when the interest stops, other things being equal. In taking up a new song, it is wise to sing it through without halting to correct mistakes. This gives the class a chance to grasp the song as a whole and to seize upon its general spirit; it also forces reading the music more into prominence, since the attention is fixed upon the rendering almost exclusively. If possible, the work should be so planned that a new song could be started in every lesson, or at least every alternate lesson.

It is of the utmost importance that the pupils be taught to keep time for themselves and not to depend upon either the teacher or their neighbors. This result may be secured by diligent work, the class counting the time of a few measures while the teacher plays. Then they should mentally feel these counts when they sing.

The voices should be kept up; the vitality and character of the voice do not appear unless the tones are placed well above the throat. This, like keeping time referred to in the last paragraph, is one of the good habits pupils should gain from their work in music. Generally speaking, when any piece is sung only indifferently well, it is largely the poor placing of the voice which is at fault.

Besides vocal music, the pupils may, under favorable conditions, become acquainted with some good standard instrumental pieces In most high schools some of the pupils play the piano or other instruments skillfully, and the teacher will do well to have such pupils play for their fellow pupils.

The use of music reproducing instruments is heartily endorsed and is coming into prominence in the schools as in the home. A piano player is of great value in the presentation of the best compositions of the greatest composers and adds greatly to musical appreciation, which is a part of musical and cultural education.

The Graphonola, the Victrola and the Edison Phonograph are especially valuable in that they are portable and easily taken from room to room. The range of selections covers instrumental, vocal, orchestral, and band compositions.

Courses of instruction may easily be arranged so that the work of a special composer or a group of composers may be studied and appreciated.

In this way musical taste may be developed in a way impossible before the development of these instruments.

In purchasing such instruments the fact should be borne in mind that money expended above a certain amount is for difference in case and does not increase the musical value of the instrument. The money is better invested in additional records than in a fancy case.

It will be well for the teacher to say a word or two, if possible, of explanation of the music or perhaps say a few words about the composer. The best results will be obtained by keeping the work as informal as possible.

In conclusion it is well to emphasize the fact that it is the pupil and not the subject which should be the teacher's chief care. No teacher who understands the subject of music thoroughly will go far astray if she does not forget the pupil in her anxiety to teach the subject.

The following is a list of selections suitable for high school music, graded according to the degree of difficulty:

High School Music.

CODA.

(Ginn & Co.)

Easy:

No.		
32	Spring's Bright Glances (Somnambula)	2c
293	A Sailor's Song (Harper)	3c
44	Happy and Light (Bohemian Girl)	2c
323	King of the Forest Am I (Parker)	4c
379	The Soldier's Dream, Paul Rodney	4c
256	The Old Guard	4c
34	Come to the Fair (Martha)	2c
297	The Clang of the Forge, Paul Rodney	3c
259	In the Harbor We've Been Sheltered (Martha)	3c
288	Sailing Marks	3c
43	Pretty Village Maiden (Faust)	2c
70	Away, the Morning Freshly Breaking	2c
255	Join in Pleasure (Erminie)	3c

192 Gloria from Twelfth Mass, Mozart..... 3c
203 Five Favorite Anthems..... 2c
220 Let Our Voices Be Glad, Lecocq..... 4c
186 Gloria, Viezie 2c
341 The Forge, Watson..... 4c

Medium Difficult:

327 O Lord, How Manifold, Barnby..... 4c
221 The Lawn Party (Waltz Song), Lecocq..... 5c
311 Olaf Trygvason, Grieg..... 5c
134 Summer Morning, H. Smart..... 2c
61 The Vesper Bells, J. Eichberg..... 3c
149 Awake! Awake! the Flowers Unfold, Leslie..... 2c
202 Jubilate Deo, B. Tours..... 2c
112 Wiegenlied, J. L. Frank..... 2c
99 May Day Sports, Gounod..... 2c

Difficult:

333 The Joy of the Hunter, Weber..... 4c
181 As Pants the Hart, Spohr..... 2c
329 Wake! to the Hunting, H. Smart..... 3c
275 Lady, Rise, Sweet Morn's Awaking, H. Smart..... 4c
83 'Tis May Day Morn, J. L. Hatton..... 2c
240 The Miller's Wooing, Faning..... 5c
377 Day Break, Faning..... 6c
280 Song of Peace, Sullivan..... 4c
162 Heaven and the Earth Display, Mendelssohn..... 3c
201 Bridal Chorus from Rose Maiden..... 5c

THE LAUREL OCTAVO.

(C. C. Birchard & Co., Boston, Mass.)

Easy:

No.
141 Lullaby from Erminie, Jakobowski..... 3c
30 The Barefoot Boy, Johns..... 3c
109 Concord Hymn, Birge..... 3c
32 The Flag, Henry K. Hadley..... 4c
128 Santa Lucia 2c
16 A Merry Life, Denza..... 3c
25 Uncrowned Kings, Loomis..... 4c
134 Freedom's Banner, Harvey.....
118 The Banner of the Free, Jude.....

Medium Difficult:

130 O, Hush Thee, My Baby, Sullivan..... 2c
20 June, Schnecker 3c
140 Song of Illyrian Peasants, Schnecker..... 3c
37 The Flower of Liberty, Neidlinger..... 4c
13 The Recessional, Huss.....

Difficult:

127 O, My Love's Like a Red, Red Rose, Garrett..... 3c
10 O, Captain, My Captain, Edgar S. Kelly..... 6c
1 Beautiful Blue Danube, Strauss.....
87 Honor and Arms, Handel.....
72 Jerusalem (Gallia), Gounod.....

THE JENNINGS COLLECTION.

(The Geo. B. Jennings Co., Cincinnati, Ohio.)

Easy:

No.
8 It Is Better to Laugh (Lucretia Borgia)..... 2c
79 A Rose in Heaven, Abt..... 2c
23 Oh! Hail Us, Ye Free, Verdi..... 3c
27 Praise Ye the Father, Gounod..... 2c
91 Soldier's Chorus, Gounod..... 3c
87 Come Where My Love Lies Dreaming, Foster..... 2c
65 Battle Hymn, Wagner..... 2c
26 The God of Israel, Rossini..... 3c
57 Hark! the Lark, Dr. Cooke..... 2c

Medium Difficult:

92 Who Knows What the Bells Say? Parker..... 2c
58 Song for Spring, E. Silas..... 2c
50 Mighty Jehovah, Bellini..... 4c
24 The Dawn of Day, Hastie..... 2c
75 The Gallant Troubadour, Watson..... 4c
90 The Lost Chord, Sullivan..... 3c
67 The Morning Sweetly Breaking, Rossini..... 2c
49 Unfold, Ye Portals, Gounod..... 3c
63 Sleep, Gentle Lady, Bishop..... 2c
66 I Will Call Upon the Lord, Mozart..... 4c

Difficult:

47 Hail the Glorious Dawn (Lucia) 2c
20 Gypsy Life, Schumann 3c
14 How Lovely Are the Messengers, Mendelssohn 3c
13 He Watching Over Israel, Mendelssohn 3c
12 Be Not Afraid, Mendelssohn 3c
44 Light and Gray, Gounod 4c
86 Pilgrim's Chorus, Wagner 2c
74 Lovely June, Arditi 3c
48 Rise! Sleep No More, Benedict 3c
45 As the Hart Pants, Mendelssohn 3c
93 Zion, Awake, Costa 4c

BEACON SERIES.

(Silver, Burdett & Co.)

Easy:

No.
141 Recessional, Boyd 2c
163 God of Our Fathers, Custance 5c
26 O, How Fair, Romberg 3c
82 The Lord Is Great, Mendelssohn 4c
38 Wanderer, Schubert 3c
53 Men of Harlech 3c
230 The Heavens Resounding, Beethoven 3c
76 Prayer During Battle, Hummel 3c
40 Lovely Night, Chwatel 3c
118 Joy, Joy, Freedom, Benedict 6c
120 The Banner of the Free, Richards 4c

Medium Difficult:

45 O Lord, Most Merciful, Concone 3c
151 The Quietude of Night (Cavalleria Rusticana), Mascagni 4c
150 Marching Along, Stanford 5c
234 Summer Fancies (Waltz), Metra 5c
Damascus Triumphal March, Costa 6c
75 Song of the Vikings, Faning 3c

Difficult:

106 The Heavens Are Telling, Haydn 6c
23 The Water Lily, Gade 3c
237 Estudiantina, Lacone 5c
96 County Fair Waltz, Abt 6c
14 And the Glory of the Lord (Messiah) 5c

High School Music Books and Song Collections.

Beacon Song Collection No. 1. Silver, Burdett & Co.
Beacon Song Collection No. 2. Silver, Burdett & Co.
The Euterpean. Silver, Burdett & Co.
The Fourth Modern Music Reader. Silver, Burdett & Co.
The Laurel Song Book. C. C. Birchard & Co.
Natural Advanced Music Reader. (American Book Company.)
Part Songs and Choruses for High Schools. (American Book Company.)
Corona Song Book. (Ginn & Co.)
The Complete Music Reader. (D. C. Heath & Co.)
Necollin's Glee and Chorus Book.—A. B. C.

Cantatas.

King Rene's Daughter, Women's Voices, Smart. (Beacon Series, Silver, Burdett & Co.)
The Norman Baron, Auderton. (Beacon Series, Silver, Burdett & Co.
The Building of the Ship, Labee. (Beacon Series.)
The Lady of Shalott, Women's Voices, Bendall. (Natural Course Leaflets.) American Book Company.

DRAWING.

Provision for the teaching of Drawing at least one period a week, during the four years of high school work, is required in all certified and commissioned high schools. It is an elective subject, unless the local school authorities rule to the contrary. Credit toward graduation may be granted for work in Drawing in proportion to the amount of time given the subject.

If Drawing is taken one hour per week for one year, one-fourth of one *credit* may be granted, and one *credit* or one-half unit for the four years' course.

If any credit beyond this is given for Drawing work it must be in accordance with the plan for the other subjects, in that there must be preparation and actual hours of recitation which may be credited, in proportion to the hours spent.

It is well to note that these credits do not count as college entrance credits in Indiana colleges.

The first essential in the teaching of drawing is a teacher who has been well trained in the subject. Such training should have been taken in a good art school.

The board makes the suggestion that it is advisable for the smaller towns and cities situated in the same territory to unite in the employment of a teacher or director of drawing. In this way a really competent and trained teacher of the subject can be secured.

Two suggested courses follow:

Course I.

FIRST HALF YEAR.

1. Drawing and painting of plant studies.
2. Drawing of objects singly and in groups—in outline and limited tone values.
3. Study of the principles of perspective. Drawing in outline.

SECOND HALF YEAR.

1. Course of Study outlined for the first half year with requirement of higher standard of technique.
2. Study of the elementary principles of decorative design. Drawing and painting borders and surface patterns.

COURSE II.

FIRST HALF YEAR.

Media: Pencil, charcoal, water color, and simple craft materials.

1. Nature Study—landscape, trees, plants.
2. Elements of pictorial composition in landscape, tree and plant work.
3. Principles of perspective and their application.
4. Still life composition.
5. Decorative design:
   (a) The study of foundation principles of design in good buildings, furniture, rugs, book covers, dishes, etc.
   (b) The production of design with nature and abstract motives.
   (c) The application of design in stenciling, wood block printing or some other line of craft work.
6. The study of a few masterpieces of architecture, sculpture, and painting in connection with the civilization that produced them.

SECOND HALF YEAR.

1. Course of study outlined for the first half year with requirement of higher standard of technique.
2. Application of the decorative work in a line of craft work differing from that of the first half of the year.
3. Study of the figure.

PUBLIC SCHOOLS.

Commissioned High Schools.

Acton.
Advance.
Akron.
Albany.
Albion.
Alexandria.
Ambia.
Amboy.
Amo.
Anderson.
Andrews.
Angola.
Arcadia.
Argos.
Ashley.
Atlanta.
Attica.
Auburn.
Aurora.
Avilla.
Batesville.
Battle Ground.
Baugo Township.
Bedford.
Berne.
Bicknell.
Blind Institute, Indianapolis.
Bloomfield.
Bloomington.
Bluffton.
Boonville.
Boswell.
Bourbon.
Brazil.
Bremen.
Bringhurst.†
Bristol.
Broad Ripple.
Brook.
Brookston.
Brookville.
Brownsburg.†
Brownstown.
Bruceville.
Bryant.*
Buck Creek.*
Bunker Hill.
Burlington.
Burnettsville (Burnett's Creek P. O.).
Burney.
Butler.
Cambridge City.
Camden.
Campbellsburg.*
Cannelton.
Carlisle.
Carmel.*
Carthage.
Castleton.
Cayuga.
Centerville.
Chalmers.
Charlestown.*
Charlotteville.*
Chesterton.

* Commission expired June 30, 1914.
† Commission to expire June 30, 1915.

Chester Township.
Chippewa.
Churubusco.
Cicero.
Clarksburg.
Clark's Hill.*
Clay City.
Clayton.
Clinton.
Cloverdale.
Coalmont.*
Coesse.
Colfax.*
College Corner, Ohio.
Columbia City.
Columbus.
Connersville.
Converse.
Corydon.
Covington.
Cowan.*
Crawfordsville.
Crown Point.
Culver.
Cumberland.
Cutler.*
Cynthiana.
Dale.
Dana.
Danville.
Darlington.
Dayton.
Decatur.
Decker.
Delphi.
Dublin.
Dunkirk.
Earl Park.*
East Chicago.
Eaton.
Edinburg.
Edwardsport.
Elkhart.
Elnora.
Elwood.
English.*
Epsom.
Evansville.
Evansville (Colored).
Fairland.*
Fairmount.
Farmersburg.
Farmland.
Flora.†
Forest.*
Fort Branch.
Fortville.
Fort Wayne.
Fountain City.
Fowler.
Francesville.
Francisco.*
Frankfort.
Franklin.
Frankton.
Freelandville.
Fremont.*
French Lick.
Fritchton.
Galveston.
Garrett.
Gary.
Gas City.
Gaston.
Geneva.
Gilead.
Glenn.*
Goldsmith.
Goodland.
Goshen.

* Commission expired June 30, 1914.
† Commission to expire June 30, 1915.

Gosport.
Grandview.
Grass Creek.
Green Township (P. O. Ridgeville).
Greencastle.
Greenfield.
Greensburg.
Greensfork.
Greentown.
Greenwood.
Hagerstown.
Hamilton.*
Hamlet.
Hammond.
Hanna.
Harlan.
Hartford City.
Hebron.
Helt Tp. (Dana P. O.).
Hillsboro.
Hobart.
Hope.
Hopewell.
Hudson.*
Huntingburg.
Huntington.
Hymera.
Idaville.
Indianapolis—
  Manual Training.
  Shortridge.
Inwood.
Ireland.
Jackson.
Jamestown.
Jasonville.
Jasper.
Jeffersonville.
Jonesboro.
Kempton.*
Kendallville.
Kentland.
Kewanna.
Kingman.
Kirklin.
Knightstown.
Knox.
Kokomo.†
Kouts.
LaCrosse.
Ladoga.
Lafayette.
Lafontaine.*
Lagrange.
Lagro.
Laketon.
Lakeville.*
La Otto.
Lapel.
Laporte.
Lawrenceburg.
Leavenworth.*
Lebanon.
Leo.
Letts.
Liberty.
Ligonier.
Lima (Howe P. O.).
Lincoln.*
Linden.
Linlawn (P. O. Wabash).
Linton.
Logansport.
Loogootee.
Lowell.*
Lucerne.
Lynn.
Lyons.
McCordsville.

* Commission expired June 30, 1914.
† Commission to expire June 30, 1915.

McKinley.
Madison.
Madison (Colored).
Marengo.
Marion.
Markle.
Martinsville.
Matthews.
Maumee Tp. (Woodburn P. O.)
Mecca.
Medaryville.*
Medora.*
Mellott.
Mentone.
Metea.
Michigan City.
Middlebury.
Middletown.
Milan.
Milford.
Milroy.
Milton.
Mishawaka.
Mitchell.
Monon.
Monroe.
Monroe City.
Monroeville.
Montezuma.
Monticello.
Montmorenci.
Montpelier.
Moreland.
Mooresville.
Morocco.
Morristown.
Mount Auburn (Edinburg P. O.).
Mount Vernon.
Mulberry.
Muncie.
Nappanee.
Nashville.
New Albany.
New Albany (Colored).
New Augusta.
New Bethel (P. O. Wanamaker).
Newburgh.
New Carlisle.
New Castle.
New Harmony.
New Haven.
New London.
New Market.
Newport.
New Richmond.
Newtown.
Noblesville.
North Judson.
North Liberty.
North Manchester.
North Salem.
North Vernon.
Oakland City.
Oaklandon.
Oaktown.
Odon.
Onward.
Orland.
Orleans.
Osgood.*
Ossian.
Otterbien.
Otwell.
Owensville.
Oxford.
Paoli.
Parker.
Pendleton.
Pennville.
Perrysville.

* Commission expired June 30, 1914.

Peru.
Petersburg.
Petroleum.
Pimento.
Pine Village.
Plainfield.
Plainville.
Pleasant Lake.
Plymouth.
Portland.
Poseyville.
Princeton.
Raub.*
Redkey.
Remington.
Rensselaer.
Richmond.
Ridgeville.
Riley.
Rising Sun.
Roachdale.
Roann.
Roanoke.
Rochester.
Rockport.
Rockville.
Rolling Prairie.
Rome City.
Romney.
Rossville.
Royal Center.
Royerton.
Rushville.
Russellville.
Russiaville.
St. Paul.
Salem.
Sandborn.
Scottsburg.
Selma.
Seymour.
Sharpsville.
Shelburn.
Shelbyville.
Sheridan.
Shipshewana.
Shoals.
Silver Lake.
Smithville.
South Bend.
Southport.
South Milford.
South Whitley.
Spartanburg.
Spencer.
Spencerville.
Star City.
State Normal High School.
Staunton.
Stilesville.
Stillwell.
Stinesville.
Stockwell.
Sullivan.
Summitville.
Swayzee.
Sweetser.
Syracuse.
Tangier.
Tell City.
Terre Haute—
  Garfield.
  Wiley.
Thorntown.
Tipton.
Topeka.
Troy.*
Union City.
Union Mills.
Upland.
Urbana.
Vallonia.*

* Commission expired June 30, 1914.

Valley Mills.
Valparaiso.
Van Buren.
Veedersburg.
Versailles.
Vevay.
Vincennes.
Wabash.
Wakarusa.*
Walkerton.*
Walnut Grove (Arcadia P. O.).
Walton.*
Wanatah.
Warren.
Warsaw.
Washington.
Waterloo.
Waveland.
Waynetown.
Wea* (P. O. Lafayette).
West Baden.
Westfield.
West Lafayette.
Westland.
West Lebanon.
West Middleton.*
West Newton.
Westpoint.
Westport.*
West Terre Haute.
Westville.
Wheatfield.
Wheatland.
Wheeler.
Whiteland.
Whitestown.*
White Water.
Whiting.
Wilkinson.*
Williamsburg.
Williamsport.
Winamac.
Winchester.
Windfall.*
Wingate.
Wolcott.
Wolcottville.
Worthington.
Young America.
Zionsville.

Certified High Schools.

Alamo.
Arlington.
Atwood.
Austin.
Bainbridge.
Beaver Dam.
Bellmore.
Bippus.
Birdseye.
Boggstown.
Boone Twp. (Harrison Co.)
Boxley.
Bridgeton.
Breaks.
Bristow.
Brooklyn.
Bryantsville.
Burkett.
Butlerville.
Cadiz.
Center Grove.
Center Twp. (Starke Co.).
Center (Rush Co.).
Chrisney.
Clark Tp. (Franklin P. O.).
Clay Tp. (Claypool P. O.).

* Commission expired June 30, 1914.

Clay Tp. (Pike Co.).
Clear Creek.
Cortland.
Clear Spring.
Cory.
Crisman.
Cromwell.
Crothersville.
Cutler.
Daleville.
Deedsville.
Deer Creek.
Denver
De Pauw.
Deputy.
De Soto.
Dugger.
Dupont.
Dyer.
Economy.*
Elizabeth.
Eminence.
Etna.
Fairbanks.
Fayettesville.
Fisher's Switch.
Freedom.
Freeland Park.
Fulton.
Gilboa.
Gov. I. P. Gray.
Graysville.
Grovertown.
Haubstadt.
Hayden.
Hazelton.
Heltonville.
Holland.
Holton.
Huntsville.
Huron.
Jefferson (Ward Twp.).
Jefferson Center.
Kennard.
Kent.*
Keystone.
Lancaster Center.
Lapaz.
Larwill.
Lawrence.
Leiter's Ford.
Liberty Center.
Lincolnville.
Lizton.
Lockhart Twp.
Losantville.
Lynnville.
Mace.*
Mackey.
Macy.*
Manilla.
Marco.
Marshall.
Mauckport.
Maxwell.
Michigantown.
Modoc.
Monitor.
Monroe Twp.
Monrovia.
Montgomery.
Monument City.
Moorefield.
Morgantown.
Moscow.
Mt. Comfort.
Mt. Olympus.
Mt. Summit.
Needmore.
New Lebanon.
New Palestine.
New Pekin (Pekin P. O.).

* Commission expired June 30, 1914.

New Ross.*
New Salem.
New Salisbury.
New Washington.
New Waverly.*
New Winchester.
Ninevah.
North Bend Tp. (Starke Co.).
North Madison.
North Webster.
Oolitic.
Owensburg.
Palmyra.
Paragon.
Patoka.
Patriot.
Pierceton.
Pittsboro.
Pleasantville.
Polk Twp. (Huntington Co.).
Prairie Creek.
Raleigh.
Richland City (Lake P. O.).
Richland Center (Fulton Co.).
Rich Square (Lewisville P. O.).
Rock Creek Center (Huntington P. O.).
Rome.*
Rosedale.
Saluda.
Saratoga.
Scipio.
Sedalia.*
Selvin.
Sidney.
Somerset.
Springville.
Spurgeon.
Stewartsville.
Straughn.
Sugar Ridge Twp.
Switz City.
Talma.
Tennyson.
Tobinsport.
Trafalgar.
Tunnelton.
Twelve Mile.
Tyner.
Union Center (Huntington Co.).
Union Twp. (Johnson Co.).
Union Twp. (Perry Co.).
Vernon.
Wadena.
Wadesville.
Waldron.
Wallace.
Washington Center (Whitley Co.).
Wawaka.
Webster.
West Twp. (Marshall Co.).
Williams.
Winslow.
Wolf Lake.
Yorktown.

Accredited High Schools.

Beech Grove.
Black Hawk.
Center Point.
Clifford.
Decker Twp. (Knox Co.).
Dunnington Parochial School.
Dyer.
Eden.
Elizabethtown.
Emison.

* Commission expired June 30, 1914.

Flint.
Fountaintown.
Freetown.
Gentryville.
Greendale.
Guilford.
Gwynneville.
Harrison.
Hillsdale.
Holton.
Huntsville.
Kingsbury.
Maple Grove.
Merrillville.
Milan Center.
Millersburg.
Mooney.
New Paris.
Newpoint.
Petersville.
Pulaski.
Reynolds.
Rock Creek Twp.
Roll.
Ross.
Ryker's Ridge.
Saltillo.
Scott.
Shelby.
Stone Bluff.
Taylorsville.
Waterford.
Waterloo (Fayette Co.).
Wayne.

Private Schools.

(Commissioned High School Standing.)

Academy of The Immaculate Conception.....Oldenburg
Academy of The Immaculate Conception.....Ferdinand
All Saints Academy.....Hammond
Bloomingdale Academy .....Bloomingdale
Central Catholic H. S.....Fort Wayne
Central College—Academy .....Huntington
Central Normal College—Academic Department.....Danville
DePauw Academy .....Greencastle
Fairmount Academy .....Fairmount
Goshen Academy .....Goshen
Hanover Academy .....Hanover
Ind. Central University—Academy.....University Heights
Interlaken School .....Rolling Prairie
Jasper College .....Jasper
Manchester Academy .....North Manchester
Marion Normal Institute .....Marion
Moore's Hill Academy.....Moore's Hill
Muncie Normal Institute.....Muncie
Oakland City Academy.....Oakland City
Plainfield Academy .....Plainfield

Sacred Heart Academy ..... Fort Wayne
St. Agnes Academy ..... Indianapolis
St. Augustine Academy ..... Ft. Wayne
St. Catherine's Academy ..... Ft. Wayne
St. John's Academy ..... Indianapolis
St. Joseph's Academy ..... South Bend
St. Joseph's Academy ..... Terre Haute
St. Joseph's Academy ..... Tipton
St. Mary's Academy ..... St. Mary's
St. Rose Academy ..... Vincennes
St. Joseph's College ..... Collegeville
Sacred Heart Academy ..... Fowler
Spiceland Academy ..... Spiceland
Taylor University ..... Upland
Theological Institute ..... Fairmount
Tri-State College ..... Angola
Tudor Hall ..... Indianapolis
Union Christian Academy ..... Merom
Valparaiso University ..... Valparaiso
Vincennes Academy ..... Vincennes
Weidner Institute ..... Mulberry
Winona Academy ..... Winona Lake

HIGH SCHOOL LIBRARY.

A high school library is an essential part of the equipment. Great judgment should be exercised in the selection, care, cataloguing and distribution of the books.

Many schools have a good working library which, for lack of organization is not fulfilling its purpose. In view of this fact there is included this year directions for the classification of libraries according to the Dewey decimal system.

This system is the basis of classification in all larger libraries and is equally adaptable to the small library.

The list of books submitted is one which has been revised by the state library and is classified according to the same system. It has been planned with reference to the needs of the average high school, and the suggestions in regard to the relative value of books will be of much aid in the choice of books to be selected first.

Classification of Library.

To have a school library of the most use possible, the books should be arranged according to subject, and the subjects should be arranged with some regard to their relations. Many schemes have been divised for the classification of books, but the one most generally used and probably the simplest to use is the Dewey Decimal Classification. As the name indicates, all knowledge is divided into 10 main divisions, and these divisions are again divided into 10 more divisions, and so on into many subdivisions. To classify a book one must decide two things: First, Of what subject does the book treat? Second, With what other books or under what subject will it be of most use? For example, if in your school library there is a book on Chemistry of foods, you will classify it with 640, Domestic Science, rather than with 540, Chemical Technology. Do not be misled by the title of a book, but put it with the other books with which it will be used. Under the class numbers arrange all books alphabetically by authors.

Following is a simplied list of numbers under which a school library may be classified. This list is partly suggested by a scheme drawn up for the use of the Oregon schools.

Ref. *General reference work alphabetically arranged:*

150 Phychology.
170 Conduct of Life, Ethics.
290 Mythology.
320 Politics and Government.
330 Economics.
370 Education.
378 Colleges and Universities—Alphabetical by name of college.
380 Commerce—Communication (for business methods use 650).
398 Legends, folk-lore, etc.
510 Mathematics.
520 Astronomy.
530 Physics.
540 Chemistry—Mineralogy.
550 Geology—Physical geography.
570 Biology—Heredity and eugenics.
580 Botany.
590 Zoology—Habits of animals.
607 Vocational guidance. Books about.

612 Physiology. Hygiene. Physical training.
630 Agriculture—General—
631 Soil. Drainage.
632 Pests.
633 Grains, grasses, tobacco, etc.
634 Fruits.
635 Kitchen garden.
636 Domestic animals.
637 Dairy and dairy products.
638 Bees.
639 Fishing, trapping.
640 Household Economics.
650 Business and Professions—Business methods, etc.
680 Manual training.
700 Fine Arts.
736 Wood Carving.
740 Drawing.
780 Music.
790 Sports.
793 Indoor Amusements.
800 Literature—General.
807 Literature Study and Teaching—Manuals, etc.
808 English language—Composition and Rhetoric.
808.5 Debating. Public Speaking.
808.8 Collections of literature, general, including various languages.
820 English and American literature.
820.9 English and American literature. History and criticism.
821 English and American poetry.
822 English and American drama.
823 Fiction.
830 German language and literature.
840 French language and literature.
870 Latin language and literature.
880 Greek language and literature.
910 Travel and description—General.
914 Travel and description—Europe.
915 Travel and description—Asia.
916 Travel and description—Africa.
917 Travel and description—North America.
917.3 Travel and description—United States.
918 Travel and description—South America.

919 Travel and description—Australia and Oceanica.
920 Biography. Collective.
921 Individual—Alphabetical by name of the subject of the biography.
930 Ancient history.
937 Roman history.
938 Greek history.
940 History of Europe—General history.
942 History of England.
943 History of Germany.
944 History of France.
950 History of Asia.
960 History of Africa.
970 History of North America. Indians.
971 History of Canada.
972 History of Mexico and Central America.
973 History of United States.
980 History of South America.
990 History of Australasia.

If a school librarian wishes to classify more closely than the numbers provided in this list, she is advised to use the "Abridged decimal classification and relative index. . . . ed. 2, by Melvil Dewey," published in 1912 and to be obtained from the Library Bureau, 6 N. Michigan Ave., Chicago, for $1.50.

The basis of choice has been the selection of those books regarded as essential, and those that are recent. Some schools are just starting their libraries, and need to know the indispensable books; others possess good working libraries and are interested in the new books and late editions. While unfortunately it has been impossible to examine carefully all the books listed, and while the books represent in a considerable degree a compilation, with selections from many lists, catalogs, bibliographies, and reviews, extreme care has been exercised in making the selections. For those desiring more extensive lists the following are suggested:

A. L. A. Catalogs. Vol. 1 to 1904; Vol 2, 1904-1911; also the subsequent annual and monthly lists. Published by American Library Association, Chicago.

A List of Books Suitable for High School Libraries, a bulletin recently published by the U. S. Bureau of Education. It is excellent because the list is prepared from the standpoint of the teacher rather than the regular librarian.

Dana's "Library Primer" published by the Library Bureau, 156 Wabash Ave., Chicago, is a standard work. The State Library, Demarchus C. Brown, librarian, is ready to give assistance at any time on any points of library management or the purchase, shelving and repairing of books.

This list has been prepared according to the Dewey system, inasmuch as that is the one currently employed. A teacher of a specific subject will find reference books included under more than one heading; for instance, the Latin teacher will find valuable reference books under 430, Latin Philology; 870, Latin Literature; 920, Biography; and 930, Ancient History. To follow the other plan and group books by high school subjects would require frequent repetitions of titles.

Government documents and bulletins have been for the most part left off the list. Librarians and teachers should secure the recently published bulletin, "Teaching Material in Government Publications" by F. K. Noyes, from the U. S. Bureau of Education. It lists the useful and available material. Lists of Farmers' Bulletins, bulletins of the Bureau of Plant Industry, the Bureau of Entomology, the Bureau of Soils, the Bureau of Foods may be obtained from the Department of Agriculture. The U. S. Geological Survey publishes valuable maps and documents. The reports and publications of the Smithsonian Institution are excellent for science instruction.

Valuable state publications are: The bulletins of Purdue Experiment Station, the reports and bulletins of the State Executive Departments, especially the Superintendent of Public Instruction, the Bureau of Weights and Measures, the State Geological Survey, the State Board of Tax Commissioners. Send to the State Library for special material on any subject. The State Library Commission also sends out circulating libraries on request.

LIST OF LIBRARY BOOKS.

Books marked with two stars ** are either indispensable or the best in the particular field; books marked with one * are very desirable, while those unmarked are either of less worth or less suitable for high school work.

000 General Reference Works.

Abstract of the thirteenth census. 1910. Bureau of the Census, Washington, D. C..... Free

Appleton's new practical encyclopedia. 6v. Appleton....$18 00
Should be purchased only by schools unable to buy the International.

Bartlett, John. Familiar quotations. Little..... 3 00

**Bliss, W. D. P. and Binder, R. N. Encyclopedia of social reform. New ed. 1908. Funk..... 7 50
Invaluable for work in civics and economics.

Brewer, E. C. *comp.* Reader's handbook of famous names in fiction, allusions, references, etc. 1906. Lippincott 2 00

**Century dictionary, cyclopedia and atlas. 12-v. New ed. Century 80 00

Cram's unrivaled atlas of the world. 1911. Cram..... 5 75

Flemming, Louis A. Synonyms, antonyms and associated words. 1913. Putnam..... 1 25

*Harper's dictionary of classical literature and antiquities. H. T. Peck, ed. Amer. bk. co..... 6 00

*Hart, A. B. and McLaughlin, A. C. Cyclopedia of American government. 3v. 1914. Appleton..... 22.50

Hoyt, J. K. *comp.* Cyclopedia of practical quotations. English, Latin and modern foreign languages. Rev. ed. Funk 6 00

Lippincott's new gazeteer of the world, ed. Heilprin. New ed. Lippincott 10 00

**New international cyclopedia. 22-v. Dodd..... 85 00

**New standard dictionary. 1913. Funk. Various prices.

*Rand-McNally's commercial atlas of America. 1911. Rand-McNally 15 00

Scientific American reference book. 1914 ed. Munn..... 1 50

Statistical abstract (annual). Bureau of Statistics, Washington, D C..... Free

**Webster's new international dictionary. 1910. Merriam 12 00

World almanac (annual). Press pub. co., N. Y. (cloth).... 50

290 Mythology.

Anderson, R. B. Norse Mythology. Scott, Foresman & Co. 2 50
**Gayley, C. M. Classic myths, based chiefly on Bulfinch's age of fable. Ginn $1 50
*Guerber, H. A. Myths of Greece and Rome. Amer. bk. co. 1 50
*Smith, W. Smaller classical dictionary. Amer. bk. co.... 1 25
Or Everyman. Dutton 35

320 Politics and Government.

**Ashley, R. L. The American federal state. 1910. Macmillan $2 00
**Beard, Charles A. American government and politics. New and rev. ed. 1914. Macmillan 2 10
**.....ed. Readings in American government and politics. New and rev. ed. 1914. Macmillan..... 1 90
**Bradford, Ernest S. Commission government in American cities. 1912. Macmillan 1 25
**Bryce, James. American commonwealth. 2v. New ed. Macmillan 4 00
.....*ibid,* abridged edition. Macmillan 1 75
**Commons, J. R. Races and immigrants in America. Rev. ed. Macmillan 1 50
Coolidge, A. C. The United States as a world power. 1908. Macmillan 50
*Dealey, J. L. The development of the state, its governmental organization and its activities. 1909. Silver..... 1 50
Federalist, The. Ed. by H. C. Lodge. Putnam 1 50
Or Everyman. Dutton 35
Goodnow, F. J. Municipal Government, 1909. Century.. 3 00
Hart, A. B. Actual Government as applied under American conditions, 1904, Longmans 2 00
Haskins, F. J. American Government. Lippincott..... 1 00
Lowell, A. L. The government of England. 2v. 1908. Macmillan 4 00
Munro, W. B. Government of American cities. 1912. Macmillan 2 00
Oberholtzer, E. P. The initiative, referendum and recall in America. New ed. Scribner..... 2 00
Ogg, F. A. Social Progress in Contemporary Europe. 1912. Macmillan 1 50

Robert, H. M. Rules of Order. Scott 75
Smith, J. Allen. The Spirit of American government. 1907. Macmillan 50
Steiner, E. A. The immigrant tide, its ebb and flow. 1909. Revell 1 50
Weyl, W. E. The new Democracy. Macmillan 50
White, A. B. The making of the English constitution. 1908. Putnam 2 00
Willoughby, W. F. Territories and dependencies of the U. S. 1905. Century 1 25
Woodburn, J. A. The American republic and its government. New ed 2 00
.....Political parties and party problems in the United States. 1903. Putnam, new ed 2 00

320 Economics.

Adams, T. S. and Sumner, H. L. Labor problems. 1905. Macmillan $1 60
Addams, Jane. The spirit of youth and the city streets. 1909. ..... 1 25
Twenty Years at Hull House. 1910. Macmillan 2 50
Bogart, E. L. Economic history of the United States. 1907. Longmans 1 75
Brown, F. K. Through the mill, the life of a mill boy, by Al. Priddy. 1911. Pilgrim 1 35
Fiske, A. K. The modern bank. 1904. Appleton 1 50
Freeman, W. G. and Chandler, S. E. The world's commercial products. Ginn 3 00
Jenks, J. W. The trust problem, 3rd ed. Doubleday 1 00
Johnson, E. R. American railway transportation. 2nd ed. Appleton .....
.....Social insurance. 1910. Macmillan 1 00
*Tarbell, Ida M. The tariff in our time. 1911. Macmillan 1 50
**Taussig, F. W. Tariff history of the United States. 1910. Putnam 1 75
Van Hise, C. R. Conservation of natural resources in the United States. 1910. Macmillan 2 00
Van Vorst, Mrs. Bessie. The cry of the children. 1908. Moffat 1 25

370 Education.

**Briggs, L. B. R. College life. 1913. Houghton..... $0 35
*Cooper, C. S. Why go to college? 1912. Century..... 1 50
*Corbin, John. Which college for the boy? 1908. Houghton 1 50
Gillette, J. M. Vocational education. 1910. Amer. bk. co. 1 00
**Hall, G. Stanley. Youth, its education, regimen, and hygiene. Appleton 1 50
**Johnson, C. H., and others. High school education. 1912. Scribner 1 50
*Laselle, Mary A. and Wiley, Katherine. Vocations for girls. 1913. Houghton 85
McKeever, W. A. Training the boy. 1913. Macmillan.... 1 50
*.....Training the girl. 1914. Macmillan..... 1 50
Parsons, F. Choosing a vocation. 1909. Houghton..... 1 00
Richardson, Anna S. The girl who earns her own living. 1909. Dodge, N. Y. 1 00
*Vocational training, prep. by com. of assn. of collegiate alummae. 1913. Address Vida Hunt Francis, gen. secy., 1420 Bellevue-Stratford, Philadelphia..... 50
*Sachs, Julius. The American secondary school. 1912. Macmillan 1 10
Talbot, Marion. The education of women. Univ. of Chicago 1 25
*Weaver, E. W. Vocations for girls. Barnes..... 75
Foght. Rural school of the twentieth century. 1910. Macmillan 1 25

398 Legends.

Bulfinch, Thomas. The age of chivalry, ed. by E. E. Hale. Lothrop $1 25
*Church, A. J. Heroes of chivalry and romance. Macmillan. 1 75
*.....Stories of Charlemagne and the twelve peers of France, from the old romances. Macmillan..... 1 75
**Lanier, Sidney. The boy's King Arthur. Scribner.... 2 00
Or The Mabinogion, tr., by Lady Guest, Everyman. Dutton 35
**Malory, Sir Thomas. Morte D'Arthur, ed. by W. E. Mead. Ginn 80

400 Philology.

**Alden, R. M., ed. English verse; specimens illustrating its principles and history. 1903 Holt $1 25
**Chubb, P. Teaching of English. Macmillan 1 00
**Greenough, B. and Kittredge, G. L. Words and their ways in English speech. Macmillan 1 10
*Gummere, F. B. A handbook of poetics. Ginn 1 00

470 Latin.

**Allen, J. H. and Greenough, J. B. New Latin grammar. Ginn $1 20
*Lane, G. M. Latin grammar. Rev. by M. H. Morgan. Amer. bk. co. 1 50
**Lewis, C. T. and Short, C. Harper's Latin dictionary. Amer. bk. co. 6 50
*Smith, W. and Hall, T. D. English-Latin dictionary. Amer. bk. co. 4 00
**Becker, W. A. "Gallus." Longmans 1 25

510 Mathematics.

*Ball, W. W. R. Mathematical recreations. 5th ed. Macmillan $2.50
*.....Short history of mathematics. 1898. Macmillan. 3 00
*Breckenridge, W. E., Mersereau, S. F., and Moore, C. F. Shop problems in mathematics. Ginn 1 00
*Cajori, F. History of mathematics. Macmillan 3 50
.....History of mathematics in the United States. U. S. Bureau of Education ..... Free
*Fine, H. B. Number system of algebra. Heath 1 00
*Gibson, G. A. Elementary treatise on graphs. 1904. Macmillan 1 00
**Marsh, H. W. Industrial mathematics. Wiley 2 00
McFarlane. Mathematical tables. Ginn 75
*Moritz, Robert E. Memorabilia mathematica. 1914. Macmillan .....(In press)
*Row, S. Geometric exercises in paperfolding, ed. by Beman and Smith. Open court 1 00
*Schubert, H. Mathematical essays and recreations. 1898. Open court 75
**Schultze, Arthur. The teaching of mathematics in secondary schools. 1913. Macmillan 1 25

Smith, D. E. The teaching of geometry. 1911. Ginn..... 1 25
Smith, W. B. Geometry of the point, ray and circle. 1892. Macmillan 75
*Young, J. W. A. Teaching of mathematics. 1906. Longmans 1 50

530 Physics.

**Adams, J. H. Harper's electricity book for boys. 1907. Harper $1 75
*Boys, C. V. Soap bubbles. 1900. S. P. C. K..... 50
*Cajori, F. History of physics. 1899. Macmillan 1 60
*Edser, E. Light for students. 1903. Macmillan..... 1 50
*Ganot, A. An elementary treatise on physics. 17th ed. 1906. Longmans 2 50
**Hopkins, G. M. Experimental science. 2v. Munn..... 5 00
*Jackson, D. C. and J. P. Elementary book on electricity and magnetism and their applications. Macmillan.. 1 40
*Maxwell, J. C. Theory of heat. 1902. Longmans..... 1 50
Page, V. W The modern gasoline automobile. Henley.... 2 50
Complete and practical.
*Perry, John. Spinning tops. S. P. C. K..... 85
Ramsay, Sir William. Conquest of the air. Moffatt..... 1 00
Rotch, A. L. Sounding the ocean of air. S. P. C. K..... 85
**Tyndall, John. Sound. 3rd ed. 1903. Appleton..... 2 00
A classic.
**Watson, W. Text-book of practical physics. 1906. Longmans 3 00

540 Chemistry.

**Armitage, F. A. History of chemistry. 1906. Longmans $1 60
**Bailey, E. H. S. Sanitary and applied chemistry. 1906. Macmillan 1 40
*Dannerth, F. Methods of textile chemistry. 1908. Wiley 2 00
**Duncan, R. K. The chemistry of commerce. 1907. Harper 2 00
**Lassar-Cohn. Chemistry in daily life. 1899. Lippincott 1 75
*Ostwald, W. Conversations on chemistry. 2v. 1905. Wiley 3 50
.....Introduction to chemistry. 1911. Wiley..... 1 50
*Philip, James C. The romance of modern chemistry. 1909. Lippincott 1 50

**Remsen, Ira. Organic chemistry. 5th rev. Heath..... 1 25
*Sherman, H. C. The chemistry of food and nutrition. 1911. Macmillan 1 50
*Snyder, H. Chemistry of plants and animal life. 1903. Macmillan 1 40
*.....Chemistry of soils and fertilizers. 1899. Chem. pub. co. (Easton, Pa.) 1 50

630 Agricultural Books.

SOILS.

Soils. Lyons and Fippin. Macmillian & Co., Chicago.... $1 75
Soils. Brooks. Home Correspondence School, Springfield, Mass..... 1 25
Soils. Fletcher. Doubleday-Page Co., Chicago..... 2 00
First Principles of Soil Fertility. Vivian. Orange Judd Co., New York 1 00
The Soil. Hall. E. P. Dutton & Co., New York..... 1.50
Soil and Soil Fertility. Whitson and Walster. Webb Publishing Co., St. Paul, Minn..... 1 25
Fertilizers and Crops. Vanslyke. Orange Judd Co..... 2 50

POULTRY.

American Standard of Perfection. Reliable Poultry Publishing Co., Quincy, Ill..... $2 00
Specialty Books on Breeds and Their Histories and Poultry Management. Reliable Poultry Pub. Co., Quincy, Illinois .....50c to 1 00 each
Principles and Practice of Poultry Culture. J. H. Robinson. Ginn & Co., Chicago..... 2 50
Productive Poultry Husbandry. Lewis. Lippincott Pub. Co., Chicago 2 00

DAIRYING.

Dairy Cattle and Milk Production. Eckles. Macmillan & Co. $1 60
Milk and Its Products. Wing. Macmillan & Co., Chicago.. 1 50
Testing Milk and Its Products. Farmington and Woll. Mendota Book Co., Madison Wis..... 1 25
Feeds and Feeding. Henry. W. A. Henry, Madison, Wis.. 2 25

HORTICULTURE.

Diseases of Economic Plants. Stevens and Hall. Macmillan & Co. $2 00
Vegetables Gardening. Watts. Orange Judd Co., New York 1 75
Injurious Insects. O'Kane. Macmillan & Co..... 2 00
The Principles of Fruit Growing. Bailey. Macmillan & Co. 1 50
Bush Fruits. Card. Macmillan & Co..... 1 50
Productive Orcharding. Sears. Lippincott Publishing Co.
Pruning Book. Bailey. Macmillan..... 1 50

CROPS.

Field Crops. Wilson and Warburton. Webb Publishing Co. $1 50
Purdue Circular No. 23. (Limited to 5 copies to a school.)
Purdue Extension Bulletin No. 2. (Limited to 5 copies to a school.)
Purdue Extension Bulletin No. 20. (Limited to 5 copies to a school.)
Purdue Circular No. 25. (Limited to 5 copies to a school.)

ANIMAL HUSBANDRY.

Purdue Circular No. 29. (Limited to 5 copies to a school.)
Types and Breeds of Live Stock. Plumb. Ginn & Co..... $2 50
Beginnings in Animal Husbandry. Plumb. Webb Pub. Co.
Animal Husbandry for Schools. Harper. Macmillan Pub. Co. 1 50
Diseases of Animals. Mayo. Macmillan Pub. Co..... 1 50
Feeds and Feeding. Henry. W. A. Henry, Madison, Wis. 2 50

Teachers should write to the United States Department of Agriculture, Washington, D. C., for a classified list of bulletins for use by teachers. Bulletins dealing with the topics of agriculture that are being taught should be selected from the list and then procured through the Congressman from the district in which the school is located.

780 Music.

*Alchin, C. A. Ear training for teacher and pupil. Ditson $1 00
Baker, T., ed. Biographical dictionary of musicians. Schirmer 3 50
.....ed. Dictionary of musical terms. Schirmer.... 1 00
Elson, L. C. National music of America. Page..... 1 50

**Faulkner, A. S. What we hear in music. Victor Talking Machine Co..... 1 00
*Goepp, P. H. Symphonies and their meaning. Lippincott 2 00
*Goetschius, P. Melody writing. Schirmer..... 1 25
**Grove, G. Dictionary of music and musicians. 5v. Macmillan 25 00
Guerber, H. A. Stories of the Wagner operas. Dodd..... 1 50
*.....What is good music? Scribner..... 1 00
Social games, plays and marches, old folk dances and rhythmic movements (American Indian). Supt. docs....
*Surette, T. W. and Mason, D. G. The appreciation of music. Doubleday..... 1 50
*Upton, G. P. Standard operas. McClurg..... 1 75
.....Standard oratorios. McClurg..... 1 50
.....Standard cantatas. McClurg..... 1 50
*Victor Book of the opera. Victor Talking Machine Co.... 75
**White, W. A. Harmony and ear training. Silver..... 1 25

800 Literature.

No attempt has been made to compass the whole field of literature in this list. In fact the selections have been greatly limited, particularly in fiction; but the books included have been chosen with care. The variety of editions of standard authors is confusing, and purchasers should exercise discrimination in making selections, noting the editor or compiler, the translator, and the publishers of the book. Reliable editions are: Astor, Gladstone (Crowell); Everyman's library, Temple Classics (Dutton); Oxford edition (Clarendon); Globe poets (Macmillan); Belles-Lettres (Heath); Cambridge, Household, Riverside literature series (Houghton); Athenaeum (Ginn). For translations of the works of classic writers of Greece and Rome the best editions are the Loeb classical library (Macmillan), and Everyman's library (Dutton).

Arnold, Matthew. Essays in criticism. 1st and 2nd series. 2v. Macmillan. Each $1 05
*Bates, Katherine Lee, ed. A ballad book. Sibley (Boston) 50
Bellamy, B. W. and Goodwin, M. W., eds. Open sesame. 3v. Ginn 2 25

Books of reading and declarations:

Caffin, C. H. The appreciation of the drama. Baker and Taylor 1 50
*Clark, S. H. ed. Handbook of best readings. Scribner.... 1 25
*Cumnock, R. M. Choice readings. 1913 ed. McClurg.... 1 50
*Foster, W. T. Argumentation and debating. 1908. Houghton 1 25
Garrett, Phineas, comp. The speaker's garland and literary bouquet. Vols. 7-9. Penn pub. co. (Philadelphia).. 6 00
Hale, E. E., Jr. Dramatists of today. 6th ed. 1911. Holt. 1 50
*Hamilton, C. M. Materials and methods of fiction. 1908. Doubleday 1 50
**Jones, Leo. Manual for debaters. 1913. Extension division. Univ. of Washington..... 15
Riddle, George, ed. Modern reader and speaker. Stone.... 1 50
*Winchester, C. T. Some principles of literary criticism. 1899. Macmillan 1 50
Wendell, Barrett. Literary history of America. 1900. Scribner 3 00

811 American Poets.

Moody, W. V. Poems and poetic dramas. 1912. Houghton $1 50
Poe, E. A. Complete poetical works. Home lib. Burt..... 1 00
**Stedman, E. C., ed. American anthology. Student's edition. Houghton 2 00
Stevenson, B. E., ed. Poems of American history. Houghton 3 00
Van Dyke, Henry. Poems. Complete collection. 1911. Scribner 2 00

Most libraries are supplied with the poems of Holmes, Whittier, Longfellow, Lowell, and Bryant. Accordingly they have been omitted from this list.

812 American Drama.

*Browne, Walter S. Everywoman. H. K. Fly and Co., Philadelphia $1 00
Mackaye, Percy W. Jeanne d'Arc. Macmillan..... 1 25
*.....The Canterbury pilgrims. Macmillan..... 1 25
.....Sappho and Phaon. Macmillan..... 1 25
**Peabody, Josephine Preston. The piper. Houghton..... 1 10
**Zangwill, Israel. The melting pot. Macmillan..... 1 25

813 American Fiction.

Aldrich, T. M. Marjorie Daw and other stories. Houghton $1 00
Allen, J. L. A Kentucky cardinal. Harper 1 00
Andrews, Mary R. S. The perfect tribute. Scribner 50
Balch, F. H. The bridge of the gods. McClurg 1 50
Burnett, Mrs. F. H. The secret garden 50
*Cable, G. W. Old Creole days. Scribner 1 25
Carleton, W. One way out 1 20
*Churchill, Winston. The crisis. Macmillan 1 50
.....Mr. Crewe's career. Macmillan 1 50
.....Richard Carvel. Macmillan 1 50
*Clemens, S. L. Adventures of Huckleberry Finn. Harper 1 75
.....Adventures of Tom Sawyer. Harper 1 75
Cooper, J. F. The leather-stocking tales. 5v. Macmillan. Each 1 25
*Davis, W. S. A friend of Caesar. Macmillan 1 50
Ford, P. L. The Honorable Peter Stirling. Holt 1 50
*Fox, John, jr. Little Shepherd of Kingdom Come. Scribner 1 50
*.....Trail of the Lonesome Pine. Scribner 1 50
Gale, Zona. Mothers to men 1 50
Grayson, David. Adventures in contentment 1 20
*Harris, Joel Chandler. Uncle Remus and his friends. Houghton 1 40
*Harrison, H. S. Queed. Houghton 1 35
**Harte, Bret. Luck of Roaring Camp and other tales. Houghton 1 50
**Hawthorne, Nathaniel. House of the seven gables. Houghton 60
.....The marble faun. Houghton 60
.....The scarlet letter. Houghton 2 00
*.....Twice-told tales. Houghton 60
*Howells, William Dean. Rise of Silas Lapham. Houghton 60
Jackson, H. H. Romona. Little 1 50
James, Henry. The American. Houghton 2 00
*.....Portrait of a lady. Houghton 2 00
Jewett, S. O. Deephaven. Houghton 1 00
Johnson, O. Stover at Yale 1 35
Johnston, Mary. To have and to hold. Houghton 1 35
London, Jack. Call of the wild. Macmillan 1 50

*Mitchell, S. Weir. Hugh Wynne, free Quaker. 2v. Century 1 50
Muir, John. Stickeen. Houghton..... 25
Norris Frank. The pit. Doubleday..... 1 50
*Page, T. N. In ole Virginia. Scribner..... 1 25
**Poe, E. A. Tales. Century..... 1 25
Or Everyman. Dutton..... 35
**Van Dyke, Henry. The blue flower. Scribner..... 1 50
*Wallace, Lew. Ben-Hur. Harper..... 1 50
*White, Stewart Edward. The blazed trail. McClure.... 1 50
*Wister, Owen. The Virginian. Macmillan..... 1 50

814 American Essays, Prose Miscellany.

Burroughs, John. Fresh fields. Houghton..... $1 15
.....Birds and bees. Houghton..... 60
Choate, J. H. Abraham Lincoln and other addresses. Century 2 00
**Crothers, S. M. The gentle reader. Houghton..... 1 25
**.....The pardoner's wallet. Houghton..... 1 25
**Emerson, R. W. Essays, first and second series. Houghton 90
**Harding, S. B., ed. Select orations illustrating American political history. Macmillan..... 1 25
**Holmes, O. W. Autocrat of the breakfast table. Houghton 50
**Irving, Washington. The sketch book. Everyman, Dutton 35
**.....The Alhambra. Ginn..... 45
*Johnston, A., ed. American orations, rev. ed. by J. A. Woodburn, 4v. Putnam 5 00
*Lincoln, Abraham. Speeches and letters. Everyman, Dutton 35
**Parkman, Francis. Oregon trail. Ginn..... 45
**Parkman, Francis. Oregon trail. Little..... 2 00
*Repplier, Agnes. Essays in idleness. Houghton..... 1 15
Ringwalt, R. C. Modern American orations. Holt..... 1 12
Reed, T. B. Modern Eloquency, 15vols..... 45 00

640 Home Economics.

*Batchelder, E. A. Design in theory and practice. Macmillan $1 75
**Farmer, F. M. The Boston cooking school book. 1906. Little 2 00
**Gibbs, Charlotte M. Household textiles. 1912. Whitcomb and Barrows..... 1 25
*Holt, L. E. The care and feeding of children. 1909. Appleton 75
Hutchinson, R. Food and the principles of dietetics. Wood 3 00
*Jordan, W. H. Principles of human nutrition. 1912. Macmillan 1 75
**Library of home economics. 12v. Amer. school of home econ. Chicago. Each 1 50
The set covers the field quite completely.
*Richards, E. H. The cost of cleanness. 1908. Wiley..... 1 00
**Snyder, H. Human foods. Macmillan..... 125
*White, C. E. Successful houses and how to build them. 1912. Macmillan 2 00
*Wing, H. H. Milk and its products. 1908. Macmillan... 1 50
*Woolman, Mary S., and McGowan, Ellen R. Textiles. 1914. Macmillan 2 00

680 Manual Training.

**Anthony, G. C. Elements of mechanical drawing. Heath $1 50
**.....Machine drawing. Heath 1 50
**Atkins, E. A. Practical sheet and plate metal work. Macmillan 2 00
Bacon, J. L. Forge practice. Wiley..... 1 50
**Bennet, Chas. A. Problems in mechanical drawing. Manual arts press..... 1 00
Bringham, Percy A. How to draw a bungalow. Milton, Bradley co 50
Carter and Holt. Easy-to-make furniture. Grand Rapids.. 2 00
**Crawshaw, F. D. Problems in furniture making. Manual arts press..... 1 00
*.....Problems in wood turning. Manual arts press.. 80
**Griffith, I. A. Essentials of wood working. Manual arts press 1 00
**.....Correlated courses in wood working. Manual arts press 1 50

Haney, J. P. Class room practice in design. Manual arts press 50
*Hodgson, F. J. Steel squares and their uses. Manual arts press 50
*.....Practical carpentry book. Manual arts press... 50
Ilgen, Wm. S. Forge work. Amer. bk. co..... 80
Manual training magazine, see numbers for Dec. 1911, April and Oct. 1913, for material on carpentry. Manual arts press. Each..... 35
Mathewson, F. E. Notes for mechanical drawing. Taylor-Holdin co., Springfield, Mass..... 1 20
**.....Perspective sketching from working drawings. Taylor-Holdin co..... 1 00
**.....and Stewart, J. L. Applied mechanical drawing. Taylor-Holdin co..... 1 00
Mechanical drawing for high schools. Atkinson, Mentzer and co 65
**Noyes, Wm. Handwork in wood. Manual arts press.... 2 00
**Palmer, R. H. Foundry practice. Manual arts press... 2 00
*Payne, Arthur F. Metal work with inexpensive equipment for grammar grades and high schools. *Manual training magazine*. Vol. XI, 1910; Vol. XIV, 1913. Manual arts press. To be published in book form.
Richey, S. E. Wood working. Amer. bk. co..... 1 45
**Rose, A. F. Copper work. Manual arts press..... 1 50
**Ross, S. A. Wood turning. Ginn..... 1 00
**King, Chas. A. Constructive carpentry. Amer. bk. co.. 70

700 Fine Arts.

**Caffin, C. H. Art for Life's Sake. Prang Educational Co.
Cross, A. K. Freehand drawing. Ginn..... 80
**Goodyear, W. H. Renaissance and modern art. Macmillan 50
*.....Roman and mediaeval art. Macmillan..... 1 00
Hamlin, A. D. F. History of architecture. 1896. Longmans 2 00
*Hurll, Estelle. Greek sculpture. 1901. Houghton..... 50
Jones, H. C. Photography of today. 1912. Lippincott.... 1 50
**Reinach, S. Appollo: An illustrated manual of the history of art. New ed. Scribner 1 50
Richardson, R. B. A history of Greek sculpture. Amer. bk. co. .....
**Tarbell, F. B. History of Greek art. Macmillan..... 50
Wagner, Leopold, ed. Modern political orations. Holt... 1 12

820 English Literature.

**Cunliffe, Pyre, Young, *ed.* Century Reading for a course in English literature. Century $2 50
Gosse, E. W. History of eighteenth century literature. Macmillan 1 00
**Mair, G. A. English literature; modern. Home univ. lib. Holt 50
**Manly, John M., *ed.* English prose. Ginn 1 50
*Newcomer and Andrews, *ed.* Twelve centuries of English prose and poetry. Scott, Foresman 1 75
Saintsbury, G. E. B. History of nineteenth century literature. Macmillan 1 50
**Taine, H. A. History of English literature. 2v. Holt. 5 00

821 English Poetry.

Beowulf, tr. by Child. Houghton ..... $ 25
.....tr. by Gummere "The oldest English epic." Macmillan 1 10
*Chaucer, Geoffrey. Complete works, ed. Skeat. Oxford ed. Clarendon 1 25
.....Canterbury tales. Everyman, Dutton 35
**Kipling, Rudyard. Collected verse. Doubleday 1 80
**Manly, John M., ed. English poetry. 1170-1892. Ginn.. 1 50
Noyes, Alfred. Collected poems. 1913. 2v. Stokes 3 00
**Palgrave, F. T., ed. The golden treasury, 1st series. Rev. ed. 1913. Macmillan 1 00
*Quiller-Couch, A. T., *ed.* The Oxford book of English verse. Clarendon 1 90
Rosetti, D. G. Poems. Gladstone ed. Crowell 75
**Stedman, E. C., *ed.* Victorian anthology. Student's edition. Houghton 2 00
**Stevenson, R. L. Poems. Biographical ed. Scribner.... 1 00
Swinburne, A. C. Selected poems. Belles lettres ed. Heath 60
Van Dyke, Henry. Poetry of Tennyson. Scribner 2 00

Recommended editions of standard English poets are: Matthew Arnold, Oxford, ed.; R. Browning, Cambridge or Everyman; Burns, Cambridge or Everyman; Byron, Globe; Coleridge, Everyman; Keats, Oxford; Milton, Cambridge; Pope, Gladstone; Shelley, Globe; Spencer, Globe; Tennyson, Oxford; Wordsworth, Globe or Gladstone.

822 English Drama.

**Barrie, J. M. Peter Pan. Scribner $1 50
*Dowden E. Shakespeare, his mind and art. Harper 1 75
Galsworthy, John. Plays, second series; including "Justice," "The little dream." 1913. Scribner 1 35
**Goldsmith, Oliver and Sheridan, R. B. Plays. Am. bk. co 80
Gregory, Lady I. A. Seven short plays. Luce, Boston 65
Marlowe, C. Plays. Am. bk. co 80
*Moulton, R. G. Shakespeare as a dramatic artist. Clarendon 1 90
Phillips, Stephen. Ulysses. Macmillan 1 25
Pinero, A. W. The thunderbolt. Baker (London) 1 50
Shakespeare, William. Plays. Cambridge ed. Houghton .. 2 25
Best one volume edition.
**.....The temple edition. 40v. Dutton. Each 35
"The best known single play edition."
.....The new Hudson edition. Ginn. Each 50
Each play one volume; excellent for notes.
.....The Arden edition. Heath 25
A volume to a play. Quite satisfactory. Not yet completed.
Woodbridge, Elizabeth. Drama, its laws and technique. Allyn & Bacon 80

823 English Fiction.

*Austen, Jane. Pride and prejudice. Everyman, Dutton. $0 35
*Barrie, J. M. Little minister. Caldwell 1 50
.....Sentimental Tommy. Scribner 1 50
Bennett, Arnold. Clay hanger. Dutton 1 50
.....Buried alive. Brentano 1 00
**Blackmore, R. D. Lorna Doone. Everyman, Dutton ... 35
*Bunyan, John. Pilgrim's progress ed. Moody. Houghton 40
*Defoe, Daniel. Robinson Crusoe. Everyman, Dutton 35
DeMorgan, William. Alice-for-short. Holt 1 75
.....Joseph Vance. Holt 1 75
**Dickens, Charles. Works published in various editions. The Macmillan edition $1 per vol., or Everyman edition, 35c per vol., is recommended. Novels most de-

sirable are David Copperfield, Tale of Two Cities, Nicholas Nickelby, and Martin Chuzzlewit.

*Eliot, George. Adam Bede. Everyman 35
.....Mill on the Floss. Everyman 35
.....Romola. Everyman 35
.....Silas Marner. Everyman 35
**Gaskell, Mrs. E. C. Cranford. Everyman, Dutton 35
**Goldsmith, Oliver. Vicar of Wakefield. Everyman, Dutton 35
Hardy, Thomas. The return of the native. Harper 1 50
.....Far from the madding crowd. Harper 1 50
*Hughes, Thomas. Tom Brown's school days. Everyman, Dutton 35
Jerome, J. K. Passing of the third floor back. Dodd 1 00
*Kingsley, Chas. Hereward the wake. Everyman, Dutton. 35
*.....Westward ho! Everyman, Dutton 35
**Kipling, Rudyard. Kim. Doubleday 1 50
**.....Plain tales from the hills. Doubleday 1 50
Marryatt, F. M. Midshipman easy. Everyman. Dutton. 35
**Scott, Sir Walter. Works. There are many editions; most of the novels are included in Everyman's library, 35c each. The most desirable are Guy Mannering, Ivanhoe, Kenilworth, Talisman, and Quentin Durward.
**Stevenson, L. L. Black arrow. Scribner 1 25
**.....David Balfour Scribner 1 25
**.....Kidnapped. Everyman. Dutton 35
**.....Treasure Island. Ginn 45
**Thackeray, W. M. Henry Esmond. Everyman, Dutton .. 35
**.....The Newcomes. 2v. Dutton. Each 35
**.....Vanity Fair. Dutton 35
.....The Virginians. 2v. Dutton. Each 35
Trollope, Anthony. The warden. Everyman, Dutton 35

824 English Essays.

**Addison, Joseph. Selections from the Spectator. Cambridge Univ. Press ..... $ 40
*Arnold, Matthew. Essays. Everyman, Dutton 35
*Bacon, Francis. The essays. Dutton 45
Benson, A. C. From a college window. Putnam 1 25
*Birrell, Augustine. Obiter dicta. Scribner 2 00

*Bronson, W. C., *ed.* English essays. Holt 1 25
Or *Lobban, J. H., *ed.* English essays. Blackie, London 1 00
**Carlyle, Thomas. Heroes and hero worship. Ginn 80
*.....Sartor resartus. Ginn 80
Lamb, Charles. Essays of Elia. Clarendon 75
**Macaulay, T. B. Critical and historical essays. 2v. Everyman, Dutton 70
**Ruskin, John. Sesame and lilies. Everyman, Dutton.. 35
**.....Unto this last. Everyman, Dutton 35
**Stevenson, R. L. Works, published in several editions. Best in Biographical ed. 31v. Scribner, $1.00 each. The best of his essays for high school use are: Across the plains; In the south seas; An inland voyage; Travels with a donkey; Virginibus Puerisque.
.....Essays, ed. by Phelps. Scribner 75
*Thackeray, W. M. The four Georges. Everyman, Dutton 35

920 Biography.

**Plutarch's lives. So-called Dryden translation, rev. by Clough. 3v. Everyman. Dutton. Each..... 35
*Rose, J. H. The life of Napoleon. 1906. Macmillan 3 00
Johnston's Napoleon (1901. Holt. $1.25) and Tarbell's Life of Napoleon Bonaparte (1911. Macmillan. $2.50) are good.
**Rosebery, Lord. Pitt. Macmillan..... 75
*Strachan-Davidson, J. L. Cicero. Putnam..... 1 50
*Tarbell, Ida M. Abraham Lincoln. 1900. 2v. McClure... 5 00
**Thayer, W. R. The life and times of Cavour. 2v. 1911. Houghton 7 50
A recent and cheaper life of Cavour that is of merit is the one by Pietro Orsi, in the Heroes of the nations series. Putnam 1 50
*Wheeler, B. I. Alexander the great. 1900. Putnam..... 1 50

930 Ancient History.

*Abbott, Evelyn. History of Greece. 3v. published to date. Putnam. Each $2 25
The best long histories of Greece are Curtius (5v. Scribner. $10.00), and Grote (10v. Harper, $17.50 or 12v. Everyman, 35c each.)
*Abbott, F. F. Roman political institutions. 3rd ed. 1901. Ginn 1 50

Or Greenidge, A. H. J. Roman public life. 1901. Macmillan 2 50

*Baikie, James. Story of the Pharaohs. 1908. Macmillan. 2 00

The same author's History of the ancient Egyptians. 1908. Scribner, $1.25; briefer than above; is better for small libraries.

*Ferrero, G. The greatness and decline of Rome. (133 B. C. to 14 A. D.). 5v. Putnam. Each 1 75

**Gulick, C. B. The life of the ancient Greeks. 1903. Appleton 1 50

**Johnston, H. W. Private life of the Romans. 1908. Scott. 1 50

**Jones, H. S. The Roman empire. (29 B. C. to 476 A. D.) 1908. Putnam 1 50

*Mahaffey, J. P. What have the Greeks done for modern civilization? 1909. Putnam 2 50

**Maspero, G. C. C. Life in ancient Egypt and Assyria. Appleton 1 50

Mommsen's history of Rome (to the death of Caesar). 5v. Scribner. Each 2 50

Or 4v. Everyman, Dutton, each 35c; and Gibbon's History of the decline and fall of the Roman empire, 7v. Macmillan, $2.00 each, or 6v. Everyman, Dutton, 35c each, are standard works, but too massive to be recommended for the ordinary school library.

*Myers, J. L. The dawn of history. 1911. Home univ. lib. Holt 50

**Pelham, H. F. Outlines of Roman history (to the fall of Rome). 4th ed. 1907. Putnam 1 75

**Schuckburgh, E. S. Greece to A. D. 14. 1905. Putnam. 1 50

*Tighe. Development of the Roman constitution. Amer. bk. co 35

Tozer, H. F. Classical geography. Amer. bk. co..... 35

*Tucker, T. G. Life in ancient Athens. 1906. Macmillan. 1 25

Valuable source books are Botsford, Source book of ancient history, 1912; Macmillan, $1.30; Davis, Readings in ancient history, 2v.; Allyn and Bacon, each $1.00; Fling, Source book of Greek history, 1907; Heath, $1.00; and Munro, Source book of Roman history, Heath, $1.00.

The best atlases on ancient history are Sanborn's Classical Atlas, 1902; Sanborn, $1.75; Kiepert, Atlas Antiquus, Sanborn, $2.00; Shepherd, Atlas of ancient history, Holt, 90c; and Longman's Classical atlas, Longmans, $2.00.

940 European History.

**Adams, G. B. Civilization during the middle ages. 1894. Scribner $2 50
Adams, G. B. Growth of the French nation. Macmillan.. 1 25
*Archer, T. A. and Kingsford, C. The crusades. 1890. Putnam 1 50
*Bryce, James. The holy Roman empire. Rev. ed. 1899. Macmillan 1 50
**Carlyle, Thomas. French revolution. Crowell..... 1 25
Also in many other editions.
*Dow, E. W. Atlas of European history. 1907. Holt..... 1 50
*Emerton, E. Mediaeval Europe. 1894. Ginn..... 1 50
**.....Introduction to the study of the middle ages. 1888. Ginn 1 12
*Gardiner, S. R. The thirty years' war. Longmans or Scribner 1 00
**Froissart, Sir John. Chronicles. Everyman, Dutton... 35
*Fyffe, C. A. History of modern Europe. 1792-1878. 1896. Holt 2 75
*Hausser, L. Period of the reformation. Amer. Tract Society (N. Y.) 1 50
*Johnston, R. M. The French revolution. 1909. Holt 1 25
H. M. Stephens' The French revolution (to 1793), 2v. Scribner, $6.00, is more complete for the period covered.
Lowell, E. J. The eve of the French revolution. 1892. Houghton 2 00
**Mathews, Shailer. The French revolution. 1901. Longmans 1 25
Ogg, F. A., ed. Source book of mediaeval history. 1908. Amer. bk. co. 1 50
**Robinson, J. H. and Beard, C. A. Development of modern Europe. 2v. 1907-8. Ginn .....v. 1, $1.50; v. 2, 1 60
**Schevill, F. History of modern Europe. 1907. Scribner 1 50
Seebolm, F. Era of the protestant revolution. Longmans or Scribner 1 00
*Seignobos, C. History of mediaeval and modern civilization to the end of the seventeenth century. 1907. Scribner 1 25
Symonds, J. A. Short history of the renaissance in Italy. Ed. by Pearson, 1894. Holt..... 1 75

**Thatcher, O. J. and Schevill, F. Europe in the middle age. Scribner 2 00
Whitcomb, M. A literary source book of the Italian renaissance. (Univ. of Pennsylvania.) Longmans..... 1 00

942 English History.

**Cheney, E. P. Industrial and social history of England. 1901. Macmillan $1 40
*.....ed. Readings in English history. 1908. Ginn.. 1 80
**Colby, C. W., ed. Selections from the source of English history. 1899. Longmans 1 50
**Gardiner, S. R. Atlas of English history. 1902. Longmans 1 50
*.....The first two Stuarts and the Puritan revolution. Longmans or Scribner 1 00
**Green, J. R. Short history of the English people. Rev. ed. 1899. Amer. bk co. 1 20
*Montague, F. C. Elements of English constitutional history. Rev. ed. 1910. Longmans 1 00
*Morris, E. E. The age of Queen Anne. Longmans or Scribner 1 00
Oman, C. W. G. England in the 19th century. Longmans 1 25

973 American History.

**American history series, ed. by J. W. Burgess, 7v. 1901-2. Scribner. Each $1 00
*Bassett, J. S. A short history of the United States. 1913. Macmillan 2 50
*Brigham, A. P. Geographic influences in American history. 1903. Ginn 1 25
**Channing, E., Hart, A. B., and Turner, F. J. Guide to the study of American history. 1912. Ginn 2 50
*Channing, E. History of the United States, to be complete in 8v. 3v. published to date. Macmillan. Each.... 2 50
*Dodge, T. A. A bird's eye view of the civil war. 1897. Houghton 1 00
**Elson, H. W. History of the people of the United States. 1904. Macmillan 1 75
**Epochs of American history, 3v. ed. by A. B. Hart. Longmans Each. 1 25
Excellent for small libraries.

**Fiske, John. Historical writing. 11v. Houghton. Each 1 80
Of Fiske's works the best are: Discovery of America, 2v., and Critical period of American history.

**Halsey, F. W. ed. Great epochs in American history. 10v. Funk & Wagnalls ..... Per set 2 50

**Hart, A. B., ed. The American nation. 28v. Harper... 42 00
(Vols. 20 and 21 on civil war by Hosmer, revised, 1913. Also Social and economic forces in American history, 1913, Harper, $1.50; consists of chapters taken from above.)

**Hart, A. B. ed. American history told by contemporaries. 1897-1901. 4v. Macmillan 7 00
Or A source book in American history. 1899. Macmillan 60

*Irving, Washington. Astoria. Putnam 75

**Macdonald, W. Documentary source book of American history. 1908. Macmillan 1 75

**Old South leaflets. Directors of Old South work, Old South meeting house, Boston, Mass. 5c each; per hundred 4 00

**Parkman, Francis. Historical works. Popular ed. 12v. 1898. Little 18 00
"A half-century of conflict," 2v. and "La Salle and the discovery of the great west," are very desirable.

**Rhodes, J. F. History of the United States from the compromise of 1850. 7v. Macmillan. Each 2 50

*Semple, E. C. American history and its geographic conditions. 1903. Student's edition. Houghton 1 60

**Sparks, E. E. Men who made the nation. 1900. Macmillan 50

.....The expansion of the American people. Scott.. 1 50

*Stanwood, E. History of the presidency (to 1897). 1898. Houghton 2 25

*.....History of the presidency, 1897-1909. 1912. Houghton 1 75

List of Publishers.

Allyn—Allyn and Bacon, Boston or Chicago.
Amer. bk. co.—American Book Co., New York, etc.
Appleton—D. Appleton & Co., New York.
Barnes—A. S. Barnes & Co., New York.
Blakiston—P. Blakiston's Sons and Co., Philadelphia.

Bobbs-Merrill—Bobbs-Merrill Co., Indianapolis.
Burt—A. L. Burt & Co., New York.
Cambridge—Cambridge University Press, London or New York.
Cassell—Cassell and Co., New York.
Century—The Century Co., New York.
Chemical—Chemical Publishing Co., Easton, Pa.
Clarendon—See Oxford.
Columbia univ. press—Columbia University Press, Lemcke & Buechner, Agents, New York.
Cram—George F. Cram, 55-61 Market St., Chicago.
Crowell—T. Y. Crowell & Co., New York.
Ditson—Oliver Ditson & Co., Boston.
Dodd—Dodd, Mead & Co., New York.
Doubleday—Doubleday, Page & Co., Garden City, N. Y.
Duffield—Duffield & Co., New York.
Dutton—E. P. Dutton & Co., New York.
Funk—Funk and Wagnalls Co., New York.
Ginn—Ginn and Co., Boston.
Harper—Harper and Bros., New York.
Heath—D. C. Heath & Co., Boston.
Holt—Henry Holt & Co., New York.
Houghton—Houghton Mifflin & Co., Boston.
Jacobs—George W. Jacobs & Co., Philadelphia.
Judd—Orange Judd Co, New York.
Kennerley—Mitchell Kennerley, New York.
Lemcke—Lemcke & Buechner, New York.
Lippincott—J. B. Lippincott Co., Philadelphia.
Little—Little, Brown & Co., Boston.
Longmans—Longmans, Green & Co., New York.
McBride—Nast & Co., McBride, Nast & Co., New York.
McClure—McClure, Phillips & Co., New York.
McClurg—A. C. McClurg & Co., Chicago.
McKay—David McKay, Philadelphia.
Macmillan—The Macmillan Co., New York.
Manual arts press—Manual Arts Press, Peoria, Ill.
Merriam—G. and C. Merriam Co., Springfield, Mass.
Methuen—Methuen & Co., London.
Moffat—Moffat, Yard & Co., New York.
Munn—Munn & Co., New York.
Newson—Newson & Co., New York.
Open Court—Open Court Publishing Co., Chicago.

Outing—Outing Publishing Co., New York.
Oxford—Oxford University Press, New York.
Pilgrim—The Pilgrim Press, New York.
Prang—Prang Educational Co., Chicago, New York.
Putnam—G. P. Putnam's Sons, New York.
Presser—Theo. Presser, Philadelphia.
Rand-McNally—Rand, McNally & Co., Chicago.
Revell—F. H. Revell & Co., New York.
Sanborn—Benjamin H. Sanborn & Co., Boston.
Scott—Scott, Foresman & Co., Chicago.
Scribner—Chas. Scribner's Sons, New York.
Silver—Silver, Burdett & Co., New York.
Small—Small, Maynard & Co., Boston.
S. P. C. K.—S. P. C. K., E. C. Gorham, Agent, New York.
Stokes—Frederick A. Stokes & Co., New York.
Stechert—G. E. Stechert & Co., 151 W. 25th St., New York.
Supt. of Docs.—Superintendent of Documents, Washington, D. C.
University of Chicago press—University of Chicago Press, Chicago.
Van Nostrand—D. Nostrand Co., New York.
Whitcomb and Barrows—Whitcomb and Barrows, Boston.
Wiley—John Wiley & Sons, New York.

Indiana Young People's Reading Circle.

LIST OF BOOKS FOR 1914-1915.

Second Grade.

1.	Stories of Famous Pictures, Book II	$0 26	
2.	Cherry Tree Children	33	
3.	Nixie Bunny in Manners Land	34	
4.	Fables from Afar	37	
			$1 30

Third Grade.

5.	The Magic Speech Flower	$0 30	
6.	The Jatakas Tales of India	30	
7.	Barbara's Philippine Journey	45	
8.	Old Mother West Wind	55	
			$1 60

FOURTH AND FIFTH GRADES.

9.	Our Common Friends and Foes	$0 26	
10.	Tales of the Romans	36	
11.	When Sarah Went to School	56	
12.	Robin Hood	57	
			$1 75

SIXTH AND SEVENTH GRADES.

13.	Peggy Owen, Patriot	$0 63	
14.	Joe the Book Farmer	63	
15.	Secret of the Clan	72	
16.	Boy Scouts of Birch Bark Island	72	
			$2 70

EIGHTH GRADE.

17.	Young Skipper of the Great Lakes	$0 64	
18.	Blue Bonnet's Ranch Party	77	
19.	Phoebe and Ernest	77	
20.	On the Trail of Grant and Lee	77	
			$2 95
	Total cost for the set of books		$10 30

HIGH SCHOOL BOOKS.

21.	An Honor Girl	$0 60	
22.	When She Came Home from College	63	
23.	New Lives for Old	70	
24.	George Washington (by Woodrow Wilson)	77	
			$2 70
	Compiete set of twenty-four books		$13 00

J. H. STAHL, Manager,
615 Lemcke Bldg., Indianapolis, Ind.

CONTENTS.

PAGE

Introduction 3
Laws and Rulings on High Schools 8
Requirements for Graduation 10
Classification of High Schools 10
Adopted Text Books for High Schools 14
Outline Course of Study 16
College Entrance Requirements 17
Daily Program 17
English, Aims 20
Literature 23
Course in Literature 25
Supplementary Reading 26
Composition and Rhetoric 27
Grammar 27
Course in Composition 30
History and Civics 32
History—
Ancient History 35
Mediaeval and Modern History 38
United States History and Civics 39
Civics 50
Foreign Languages 56
Latin 56
Beginning Latin 56
Caesar 63
Cicero 65
Vergil 68
German 71
Mathematics 80
Algebra 80
Geometry 83
Commercial Arithmetic 86
Science 90
Botany 90
Zoology 91
Physics 92
Chemistry 96
Physical Geography 97
Commercial Geography 105
Industrial Arts (Prevocational) 111
Domestic Science (Prevocational) 113
Agriculture (Prevocational) 116

PAGE
Music 128
Drawing 130
Commissioned High Schools 132–137
Certified High Schools 137–139
Accredited High Schools 139–140
Private Schools (Commissioned High School Rank) 140–141
High School Library 141
Classification of Library 142
List of Library Books 146
List of Publishers 167
Reading Circle (Young People's) 169

LIBRARY OF CONGRESS
0 019 745 195 6